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I.—ON ADAPTATION OF SUFFIXES IN CONGENERIC CLASSES OF SUBSTANTIVES.

The term adaptation is used here to designate the infusion with some definite grammatical or lexical value, of a formal element originally either devoid of any special functional value, or possessed of a value which has faded out so completely as to make this infusion possible. Thus in English *sing, sang, sung*; German *werde, ward, (ge-)worden* the different vowels are felt to be the carriers of the tense-distinction. Here the association of the vocalic variations with temporal distinctions is a comparatively recent development: the variation (ablaut) is due to phonetic causes, very largely differences in accentuation, which had no direct connection with temporal distinctions. But with the decay of the inflectional elements which did convey the distinctions of tense, the vowel of each form was associated more and more with the special vocalic color of the root, until in modern English radical *i* is to all intents and purposes the significant vowel of the present, *a* of the imperfect, and *u* of the perfect passive participle. It is as though Homeric *δέρκομαι, δέδορκα, ἔδρακον* had in the later development of Greek speech become subject to a phonetic corruption which stripped them of personal inflections, reduplication and augment resulting in pres. **δερκ*, perf. **δορκ*, aor. **δρακ*, and *e, o, a* would then be felt as the respective causes of the varying tense-values. An instance in which the grammatical value of a form has faded out so completely as to permit its infusion with a new value, originally altogether foreign to it, is the use of the element *-mini* in Latin as the personal inflection of the second plur. passive. Lat. *legimini* (sc. *estis*) is = *λεγόμενοι*, nom. plur. masc.

of the middle-passive participle. After this form had been woven into the paradigm of the present passive its origin was entirely forgotten; it was felt to be a personal inflection, and was then extended throughout the passive system, yielding *legēbāminī*, *legēminī*, *legāminī* and *legereminī*, thus succeeding in adapting the form *-minī* completely to the use of an ordinary personal inflection. Other cases of adaptation in modern English are contained in *men, feet* as the plur. of *man, foot*: here the umlaut (cf. Germ. *männer, füsse*) has been adapted as a plural sign; in *oxen* as plur. of *ox* (Germ. *der ochs, des oxsen*, both singular): here the element *-en-* originally a nominal suffix (cf. Vedic *ukṣān-* 'ox'; Lat. stem *homin-* 'man') has been adapted to use as a sign of the plural. Cf. in general Paul, *Prinzipien der Sprachgeschichte*¹, p. 172; Delbrück, *Einleitung in das Sprachstudium*¹, pp. 66 fg. (where Ludwig's theory and writings on adaptation are quoted and discussed), 96 fg.; Windisch, *Personalendungen im Griechischen und Sanskrit*, *Transactions of the Royal Saxon Academy*, March 2, 1889, pp. 7 fg.

1. The Greek Nominative ποῦς.

An ancient riddle of Greek grammar is the Ionic-Attic nominative ποῦς, gen. ποδ-ός. A more original nominative in Greek appears in Doric πῶς, preserved in the gloss of Hesychius, πῶς¹. πός. ὑπὸ Δωριέων (cf. also his other gloss πόρ· ποῦς. Λάκωνες). The diphthong ου of ποῦς cannot hail from proethnic times, as the related languages have only monophthongs: ē in Latin *pēs* (**pēd-s*) and *com-pēs*; ō in Doric πῶς, Lat. *com-pōs* = *com-pēs* in Priscian i. p. 26 H, Gothic *fōt-us*, nom. plur. Old Norse **fōt-ir* in *fōetr* (umlaut); ō in ποδ-ός, Lat. *tri-pod-ātus*; Umbrian *du-purs-us*, *petur-purs-us* 'bipedibus, quadrupedibus' (Iguvinian tablets vi. b); ē in *ped-is*, πέλα (*πεδ-ῑα), etc.; reduced root *pd-* in Zend *fra-bd-a* 'fore-foot.' Nowhere is there an opening for an original Greek diphthong ου = I. E. *ōu* or *ōu*;² the stem evidently belongs to the so-called *e-o-series*. As a special Greek *phonetic* development, Attic oxytone ποῦς could stand only for **πόυς* (cf. Cretan *τόυς* = Attic *τοῦς*)

¹ For the accent of this form see the author in A. J. P. IX 15; Brugmann, *Griechische Grammatik*², §74.

² Sk. *pād*, gen. *pad-ds*; Zend *pāḍ-em* and *pāḍebyō* exhibit the same relations of quantity as appears in the European languages: the qualitative relation has disappeared. But there is no diphthong.

or **πόνυς* like the participle *δούς* for **δó-ντ-ς*. For these there is no basis.

Various attempts have been made to explain the form, some in recent years, e. g. by Joh. Schmidt in KZ. xxv. 16, and Solmsen *ibid.* xxix. 358, note. I regard them as unsatisfactory and omit their refutation. G. Meyer, *Griech. Gramm.*² §313, says: 'Attisch *πούς* jedenfalls eine Neubildung ist bisher unerklärt.' Very recently Brugmann, *Grundriss* ii. 450; *Griechische Grammatik*³, §74, is of the same opinion. I believe that Attic-Ionic nom. *πούς* foot is made in direct imitation of Pan-Hellenic *ὀδούς* tooth,¹ the point of contact being the meaning: *both are parts of the body*. Designations of parts of the body exercise strong analogical influence upon one another, and occasionally the suffix of some one of them succeeds in adapting itself so as to be felt the characteristic element which bestows upon the word its value. That is to say, when such a suffix has spread analogically to a greater or lesser extent within the category, then the meaning of the category may be felt to be dependent upon the special form of the suffix, or, stated conversely, the suffix may be infused with the special characteristic of the category; after that, when occasion arises to form new words of this same class, the suffix is put into requisition as though it were the essential element which imparts to the word its special significance. This thesis, though stated narrowly for the present only in reference to designations of parts of the body, is sufficiently important to justify our dwelling upon it at length; it will in the end lead us to a much broader field than the one just indicated. First we shall assemble certain cases in which assimilation and adaptation has influenced designations of parts of the body.

2. Designations of parts of the body by heteroclitic stems in *r* and *n*.

As early as I. E. times a considerable group of designations of parts of the body were formed after a peculiar heteroclitic declension. They were neuters having the casus recti in *-r* and the casus obliqui in *-n*:

liver: ἥπαρ, ἥπατος; Lat. *jēcur*, *jēcīnoris* (for **jecinīs*: the syllable *or* came in from the nominative, perhaps through the

¹ Aeolic *ἔδοντες* is transformed by popular etymology (*ἔδω*). *ὀδών*, Hdt. vi. 107; Herodian ii. 928, 11, is the result of proportional analogy: *ἰδόντες* : *ἰδών* = *ὀδόντες* : *x*, i. e. *ὀδών*.

channel of the genitive *jēcoris*, which in turn was made upon the base of the nom.; cf. *über-is* below); Sk. *yākṛt*, *yaknás*; Zend *yākare* (Zend-Pehlevi glossary: the oblique *n*-stem does not occur); Lith. *jekn-os*, fem. plurale tantum, and *jekanas* (Bezzenberger, zur Geschichte der litauischen Sprache, p. 291) are based upon the *n*-stem, the *r*-stem being wanting. Through the medium of a 'ground-form' *lĕqṛt* Joh. Schmidt, Die Pluralbildungen der indogermanischen Neutra, p. 198 fg., adds to this group the German words for 'liver,' Ohg. *libera*, *lebera*, Ags. *lifer*, as also Armenian *leard* and Old Prussian *lagno*.

udder: oðap, oðaros; Sk. *ūdhār*, *ūdhnas*; Latin *uber*, which has passed also into the oblique cases: the *n*-stem perhaps in *Oufen-s* (Festus), *Ufen-s* 'name of a river.' Germanic forms: Mhg. *üter*, Nhg. *euter*, Ags. *of ūdrum* 'uberibus,' Eng. *udder* exhibit the *r*-stem; in Ohg. dative sg. *ūtrin* there is mixture of *r*- and *n*-stems in reversed order from that which has taken place in Lat. *jecinoris*; see above.

blood: Vedic *dsṛg* (TS. *dsṛt*), *asnás*, classical Sanskrit *asr-a-m*; Greek *īap*, Epic *ēlap* = **īap*, the corresponding *n*-stem being lost; Lat. *assir* in Festus, Paul Epit. p. 16; Loewe, Prodr. 142. Lettish *asins* presents the *n*-stem. I. E. *ēsr̥* or *āsr̥*, gen. *asn-ós*.¹

thigh: *fēmur*, *fēminis* with assimilations in both directions; the nom. *fēmen* (rare according to Priscian vi. 52) and the genitive *fēmoris* (cf. *jecoris*, above).

wing: *r*-stem, Lat. **peter* in *acci-piter*² 'quick-wing, falcon'; the *n*-stem *petn-* in *penna* for **petn-a* 'wing, feather.' The *r*-stem further in πτερόν, Ohg. *federa*, *fedara*, Ags. *feðer*, Sk. *patr-a-* 'wing, feather,' Zd. *patere-ta-* 'winged' (cf. πτερωτόν), Cymric *atar* 'winged.' The *n*-stem further in Cymric *etn*, Old Irish *én* 'bird.' The recent discussion of the word by Joh. Schmidt, loc. cit. pp. 173-176, seems to establish the I. E. bases *pét̥r̥*, gen. *petn-ós* in close parallelism with the word for 'blood' above: *āsr̥* or *ēsr̥* (cf. *ēlap*), gen. *asn-ós*.

inner body, viscera, vein: Homeric *ἥτορ* with Aeolic *op* for

¹ According to De Saussure (Mémoire, p. 225), Lat. *san-gu-en* (Ennius ap. Cic.) belongs to this group, *san-* for (a)*sn-* with *gu* from the nom. (cf. Sk. *dsṛg*). The *-en* at the end a second time in deference to the old declension of the word in the oblique cases (Vedic *asn-ds*). Differently W. Schulze, KZ. xxix. 257.

² *accipiter* for **acu-piter* (cf. *acu-pedius*, ἄκβ-ς) may be the result of popular etymology which associated the word with *accipio*; see Joh. Schmidt, Pluralbildungen, p. 174.

ap (Schmidt, *ibid.* 177) 'heart' and *ἡτρ-ο-ν* 'abdomen'; Ohg. *ādara*, *inn-ādiri* 'viscera,' Ags. *aedre*, Old Norse *aeðr* 'vein,' Obg. *ēdro* 'bosom' (formed like *ἡτρων*), Oir. *in-athar* 'entrails.' The complementary *n*-stem is wanting, but the restriction of the declension of *ἡτρ* in Homer to the *casus recti* (dative *ἡτρσι* later, Simon. 7. 7) shows that the type was once **éter*, **ētn-ós*, or the like. For the variety of meanings cf. Vedic *hirá* 'vein,' Lat. *hīra* 'intestine,' *harū-spex* 'he who inspects the entrails, soothsayer.'

excrement: *σκῶρ*, *σκαρός*; Sk. *śākṛt*, *śaknás*;¹ Lat. *mūs-(s)cerda*, Festus 146 (thence *cerda* falsely clipped off for *bū-cerda*, etc., Schmidt, *ibid.* 178); Old Norse *skarn*; Obg. *skvrina*; Lith. *tu skverne* 'invective against misbehaving children.' In the last three the *r*- and *n*-stems are blended; cf. *jecinoris* and *utrin*, above.

nerve, sinew, etc.: I. E. *casus recti snēuer*, *snēur-t*; *casus obliqui snēyn-ós*, etc. Zend *snāvare* 'sinew,' Ossetic *navr* 'vein,' Ohg. *snuor* 'schnur,' Goth. *snōr-jō* 'wicker-basket,' from stem *snēuer*. The stem *snēurt* in Arm. *neard* 'nerve, sinew,' Hübschmann, *Armenische Studien*, p. 45, Nr. 217. The *n*-stem in Vedic *snāvan* 'sinew, string.' Greek *νεῦρο-ν* contains the usual extension to the *o*-declension = *snēuro-*. For Latin *nervu-s* see Vaniček, *Griechisch-Lateinisches Wörterbuch* ii. p. 1161.

gall: Gr. *χολερός* seems to be an extension of an *r*-stem (cf. *ἡμέρα* : *ἡμαρ*) which is supplemented by the *n*-stem contained in Ohg. *galla*, O. Norse *gall*, Lat. *fellis*. The stems seem to have been I. E. *zholr-*, *zholn-ós* or *zheln-ós*. Cf. Froehde, Bezz. Beitr. vii. 105; Johansson, Gött. Gel. Anz. 1890, Nr. 19, p. 766, note.

mouth, jaw: Zend *zafare*, gen. *zafanō*. The *r*-stem is occasionally extended into the oblique cases: dat. *zafre*; nom. plur. *zafra*. The *n*-stem also in *pri-zafanem* acc. sg. masc. 'three-headed.'

flat of the hand, sole of the foot: *θέναρ*, *θένapos* (the *r*-stem extended through the oblique cases), *ὀπισθέναρ* for **ὀπισθόθεναρ* (haplography) 'outer hand,' *ὑπόθεναρ* 'palm under the thumb'; Ohg. *tenar*, *tenra*, Mhg. *tener* 'flat hand.'²

¹ *śak-* for *sak-* by assimilation of the dental sibilant to the guttural of the consecutive syllable; see Bloomfield and Spieker, *Proceedings of the American Oriental Society* for May, 1886, p. xl. (*Journal*, Vol. xiii, p. cxxi). Is Lat. *cōram* (**cōsam*) from a root whose Sk. equivalent is *kāṣ* = *kās* 'to be visible'? Cf. *sa-kāṣa* 'presence,' *sakāṣe* 'in the presence of, near,' Āçv. Gr. i. 18. 7.

² The adaptation of the suffix *r-n* to this group extended itself also to the originally broader meaning of the word, which seems to have been 'flat

The limitation of this class is not by a hard and fast line. Perhaps *ᾠδερῶ-ς* · *γαστήρ* (Hesych.), Vedic *udará-m* and *uddra-m* belly, stomach, represent another *r*-stem of this class, extended by the suffix *-o-*. Likewise *σῦφαρ* 'wrinkled skin' (cf. Lat. *sūber* 'cork-tree: tree with wrinkled bark'); *ιχώρ* lymph, ichor (cf. *ἔαρ* 'blood') and *ἄχωρ* scurf (cf. *σκῶρ* 'excrement') may belong here, in part by later adaptation within Hellenic times. For the remaining stems in *ρ* in Greek see below, p. 21, note.

That so large a portion of the limited group of heteroclitic nouns in *r-n* should have been absorbed by designations of parts of the body admits of but one explanation. The suffix, in the first place, had no intrinsic value which rendered it especially suitable for words of this kind. It was employed accidentally in some one or two such designations, and thence it was extended gradually by single acts of analogy, becoming more and more productive, until it had adapted itself in proethnic times to this special use. As it was, it never became restricted exclusively to such use (see *ῥῥωρ*, *ῥῥατος* and more below): neither did the entire domain of designations of parts of the body succumb to it, nor did it sharpen its own physiognomy to such an extent as to be rendered unfit for other service.

3. Designation of parts of the body by other heteroclitic declensions with *n*-stems in the oblique cases.

The *n*-stems which appear in the oblique cases of the heteroclitic declension in *r-n* occupy the same territory, the oblique cases, in the paradigms of certain other heteroclitic declensional types; here also the meaning is prevailingly that of parts of the body. The process of adaptation which resulted in the feeling that oblique cases of *n*-stems, when combined with *r*-stems in the casus recti, were suitable for this class of nouns, appears in operation—also in proethnic times—with other stems: consonantal stems, *i*-stems, *s*-stems:

ear: genitive *οὔρατος* for **οὔρατος*, Gothic *ausin-s*. The stem of the casus recti is partly consonantal, as in Latin *aus* of *au(s)-dire*, *aus-culto*, Old Irish *ó*; partly *i*-stem as in Lat. *auri-s*, Lith. *ausi-s*

expanse, *ἄλδς θέναρ* 'expanse of the sea,' cf. Vedic *samudrasya dhánvan* 'on the strand of the sea.' If *dhánvan* = *θέναρ* (for **θείναρ*, cf. *εἶδαρ* and *ἔδαρ*, Hesych.) we have the *n*-stem which has been expelled by the *r*-stem in Greek. Cu. Etym.⁵, p. 255, compares also Mhg. *tenni* 'tenne.'

(in both the *i*-stem is extended through the paradigm), Zend *uši* 'ear,' Obg. *uši* 'the ears'; and partly *s*-stem as in *ausos* in Obg. *ucho*, gen. *ušese*. According to Joh. Schmidt, KZ. xxvi. 17, Pluralbildungen, p. 407, Greek *οὖς*, Doric *ῶς* are the contracted forms of **ούσος* rather than the direct equivalents of Latin *aus*-. In German the *n*-stem, Goth. *ausin*-, nom. *ausō*, just as in *augō*, *hairtō*, etc., below, has usurped the entire paradigm.

head: gen. Ved. *ḡr̥ṣhás*, Hom. *κράτος*, Attic *κρῆτός*. The *n*-stem also in *ἀμφί-κράνο-ς* 'two-headed.' Casus recti, originally: Sk. *ḡras* 'head, point' = *κέρας* 'horn,'¹ Lat. **ceres* in *cerebrum* for **ceres-rom* (Brugmann, Grundriss i. p. 430; ii. p. 175); Old Norse *hjarsi* 'crown of the head,' Ohg. *hirni* for **hirzni* (mixture of the *s*- and *n*-stems as in Ved. *ḡr̥ṣhás*: Kluge, Paul und Braune's Beiträge, viii. 522 fg.).²

eye: Gothic genitive *augins*, Sk. gen. *akṣhás*: the *ḡ* = I. E. *s* is from an *s*-stem I. E. *oq-os* = Obg. *oko*, gen. *ocese* (cf. the *s*-stem in the nom. of the word for 'ear,' above). Joh. Schmidt finds the *n*-stem corresponding to *augin*- in *προσ-ώπαισι* and Hom. *εὐρύ-ονα* (ibid. 109, 398, 400); the *n*-stem corresponding to Sk. *akṣn*-indirectly in Aeolic *δππαρα* (ibid. 408 fg.). The casus recti were made from the *s*-stem *oqos*, above; from *i*-stems in Lith. *akl-s* 'eye,' **augi*- in Goth. *and-augi-ba* 'plainly,' Ohg. *augi-wis* 'publice,' and the duals *ḡσε* = **oq̥e*, Obg. *ōci*, Zend *aši*; and from consonantal stems *ἐλίκ-ωπ-ες* 'Ἀχαιοί', Hom. The German has passed the entire paradigm of the word into the *n*-declension: Goth. *augō*, Ohg. *auga*; cf. *ausō* above. For Arm. *akn* see p. 9.

The productivity of this suffix in the oblique cases of words for parts of the body, coupled with other stems in the casus recti,³

¹ So we may now write indiscriminately all Zend *sh*-sounds, since Geldner's edition of the text renders the separation into varieties of secondary importance; cf. A. V. W. Jackson, The Avestan Alphabet, p. 20.

² But Hesych.: *κέρας* κεφαλῇ; Etym. Mag. 504, 50: *κέρας* λέγεται καὶ ἡ κεφαλῇ. Original meaning of the group: 'the highest part of the body: head with men; horn with horned animals.'

³ Exhaustive collections of material, and thorough discussions of this stem and its derivatives in Danielsson, Grammatiscche und Etymologische Studien I. *κάρα*, *κέρας*, Upsala Universitets Årsskrift, 1883; Joh. Schmidt, Pluralbildungen, pp. 363-378.

⁴ The last three Schmidt, ibid. p. 398, regards as consonantal stems with dual ending *i*.

⁵ Except when the entire paradigm of the words of this class has assumed the *n*-type, as is the case in German and Armenian; see Gothic *ausō*, *augō* above, and cf. the next subdivision of this article.

continues in a marked fashion in the separate languages. It is of course impossible to say in every case that this condition is a creation of the separate language: often the *n*-stem may have been lost in all but one language. But there are cases when it may be assumed with great show of probability that the process of adaptation which started this non-descript suffix upon a strongly individualized career in I. E. times was repeated anew by several of the languages. We begin with the cases from the German, where the domain of the neuter *n*-stems is almost entirely monopolized by designations of parts of the body; see Kluge, *Stammbildung*, §78.

heart: gen. Goth. *hairtins*, with secondary nom. *hairtō*. The old casus recti were formed from consonantal stems: κῆρ(δ), Ved. *su-hārd* 'of friendly heart'; Lat. stem *cord-*, Sk. *hṛd*, Zend stem *zered-* in instrumental *zeredā*, Yasna 31. 12 (Geldner's ed.); and from *i*-stems, Vedic nom. *hṛdī*, Ohg. *herzi-suht* 'cardia,' Lith. *szirdī-s*, Obg. *sridī-ce*. Cf. also Greek *καρδία* and *καρδία*, and Sk. *hṛdaya*.¹

testicle: Old Norse *eista*, neuter *n*-stem. An *s*-stem, perhaps as original representative of the casus recti, appears in Obg. *isto* 'testicle' (cf. the *s*-stems *oko* 'eye,' *ucho* 'ear').

cheek: Ohg. *wanga*, neut.; Ags. *wonge*, neut. Old Norse *vange* is masculine; Old Saxon *wanga* is fem. See Kluge, *Nominale Stammbildungslehre*, §78ab; Schmidt, *Pluralbildungen*, p. 107.

lung: Old Norse *lunga*. Kluge, *ibid.*; Schmidt, 108.

ankle: Old Norse *okla*. See *ibid.*

collar-bone: Old Norse *viðbeina*. See *ibid.*

breast-bone: Old Norse *flagbrjóska*. See *ibid.*

The following oblique cases of *n*-stems are restricted to Sanskrit, though in more than one case the possibility that correspondents existed in the related languages must be taken into account.

mouth: Sk. gen. *āsn-ds*. Casus recti Lat. *ōs*, Sk. *ās*, consonantal stems; (*āsya-m*), *āsia-m*, *īo-stem*.²

¹ The *n*-declension of this stem is at least Proto-Germanic and may, as far as the oblique cases are concerned, reach back to I. E. times, though this does not admit of proof: Goth. *hairtō*, Old Norse *hjárta*, Old Saxon *herhta*, Ohg. *herza*. Ags. *heorte* has assumed the feminine gender.

² According to Geldner, *Metrik d. jüng. Avesta*, and KZ. xxiv. 548, Zd. *āōhānō*, Vend. iii. 29, and, according to Bartholomae, *Bezz. Beitr.* xv. 33 fg., Zd. *asne* and *āsnaē-ca* also represent the *n*-stem (*āsn-*) of this word. The heteroclisis in that case may date back to Indo-Iranian times.

bone: Vedic gen. *asthn-ās*. Casus recti *ásthi*, Lat. *os*, stem *ost-*, gen. *oss-is*. Even the Zend, the nearest relative of Vedic, has the gen. *ast-as(ca)* according to the consonantal declension. Greek ὀστέ(ι)-ος 'bone' and ὀστέ-πος 'bony.'

thigh: Vedic gen. *sakthn-ās*, casus recti *sákthi*. No certain correspondent in any of the related languages. Cf. De Saussure, *Mémoire*, p. 226.

fore-arm: Vedic gen. *doṣn-ās*. The casus recti have consonantal *dos*, which in the later language penetrates into the casus obliqui, e. g. *dor-bhyām*, *Mbhār.* i. 153, *dor-bhis*, *Mālavikā* 77.

In Zend also we may note the inroads of this adaptation in two cases of especial interest:

nose: The abl. *nāōñhanat* occurs at Vend. iii. 46; ix. 158. It is based upon an *n*-stem *nāsn-*. The prevailing inflection in Vedic is upon the basis of the consonantal stem *nās-* in nom. du. *nāsā*, and oblique cases *nas-ā*, *nas-i*, *nas-ós*. Cf. Old Persian acc. *nāham*.

tooth: The stem *dantan-* represents the prevailing form of this word, and it has remained masculine notwithstanding its transition to this type. See Justi, sub voce, and *dantāno*, nom. plur. masc. Zend-Pahlavi Glossary (Haug and West, pp. 8. 3; 49. 14, etc.). In addition to this the stem *dāta-* in *dātāhva*, Vend. xv. 4, and *tiži-dāta-*, Vend. xiii. 16, is left as the representative of the old consonantal stem, which has passed into the *a*-declension. *dāta* = *dāt-ā*?

4. Designations of parts of the body in Armenian.

Upon the ground of the Armenian we do not venture with full confidence, as the history of the individual words involved in this discussion is by no means clear in every detail. But it is worth while to point out how completely the *n*-declension has taken hold of the designations of parts of the body; in fact, how large a part of the territory occupied by such *n*-stems, as are at all clear etymologically, is in the hands of the semasiological category in question. We have here in the first place the word for eye, nom. *akn*, gen. dat. *akan*. Here the *n*-declension in the oblique cases is certainly old, and has absorbed the entire paradigm just as in Goth. *augō*, *augins*. Cf. Hübschmann, *Armenische Studien*, p. 17, Nr. 4. The word for ear, *unkn*, is treated most recently by

¹ Possibly ὀστέ-κο-ς for *ὀστέ-κο-ς 'crab' shows a trace of the *n*-stem in Greek; cf. Brugmann, *Grundriss* ii. p. 243.

Friedrich Müller, *Armeniacae* vi. p. 5, Nr. 49 (Transactions of the Imperial Academy of Vienna, Vol. cxxii. 1890). The form is explained most naturally on the supposition that it is based upon the old *n*-stem of the oblique cases: *ušn* = Goth. *ausin* = Gr. *oŷa*-(*ros*). I would suggest that to this was added the *-kn* of *akn* eye, making *ušn-kn*, which changed to *unkn*: the words for eye and ear are especially prone to assimilate; see below, p. 13, note. Now it is surely not the result of accident that *armukn* elbow, gen. *armkan* (Hübsch. p. 21, Nr. 45) and *mukn*, gen. *mkan* muscle (also 'mouse,' Hübsch. p. 44, Nr. 206) are declined in a parallel fashion. It is hard to believe that we have not here the adaptive influence of *akn* eye and *unkn* ear.¹ But further, we find under the control of the *n*-declension the words for tooth *atamn*, gen. dat. *ataman* (Hübsch. p. 20, Nr. 33); for nose, *rungn* (Müller, p. 6, Nr. 55); for foot, *otn*, gen. *otin* (Hübsch. p. 46, Nr. 230); for hand, *jeŷn*, gen. *jerin* (ibid. p. 40, Nr. 174). We have thus eight designations of parts of the body, most of them very common, exhibiting similarities of treatment which is in some instances palpably secondary (e. g. in *otn*, which represents the I. E. stem *pōd-*), and due no doubt in some measure to assimilation with other members of the same class. It is of course possible that the transition of these words to the *n*-declension is only a part of the more general movement which has drawn other Armenian substantives into the weak declension; see Hübschmann, ibid. p. 18, Nr. 12; p. 19, Nr. 22; p. 20, Nr. 31; p. 28, Nr. 86; p. 40, No. 180; p. 44, Nr. 207; p. 48, Nr. 245; p. 55, Nr. 291. We do not venture to decide in every detail the points here suggested, but would emphasize once more that the *kn* at the end of four of these words is in all probability due to adaptation, while, as a matter of fact, the appearance as *n*-stems of eight of these words presents essentially the same outcome which we have seen in the spread of the *n*-suffix in the Germanic designations of members of the body.

5. The I. E. word for 'member, limb.'

An old I. E. word for part of the body in general seems to me to have fallen under the ban of this adaptation of the *n-r*-suffix. Lat. *membru-m* is now generally explained as coming

¹ In the case of *mukn* the *k* may be the residue of an original diminutive stem reflected by Lat. *muscu*-(*lus*), Sk. *mūṣaka*: this rendered the adaptive process easier.

from *mēns-ro-* = Old Irish *mīr* 'piece of flesh,' from **mēns-ra-*, both being derived by secondary extension by suffix *-ro-* from an old stem for 'flesh,' Vedic *māṁsá-* 'flesh,' *māṁs-pácana-* 'pertaining to the cooking of meat'; Goth. *mimza-* 'meat,' Obg. *mešo* 'meat.' But the Irish derivative with *-ro-* still means 'meat,' and not 'limb.' On the other hand, Vedic *márman*, which the Petersburg Lexicon—perhaps without desire to etymologize—translates by 'membrum,' is the true semasiological correspondent of *membrum*; see e. g. AV. vi. 73. 18: *mármāṇi te vārmaṇā chādayāmi* 'I cover your limbs with a coat of mail.' At Kāuṣ. 13. 6 seven members (*sapta marmāṇi*) are spoken of, and the commentator specifies—with what justice it is hard to say—*pādamadhyāni nābhihṛdayam mūrdhā ce 'ti.*' Vedic *márma* is I. E. *mērmn*, and may have had the *r*-stem **mermer* as well as its usual side-form in *-o-*, **mermro-*; cf. above Sk. *asra-* by the side of stems *asn-* and *āsg-*; *pātra-* and *περό-* by the side of *acci-piter*; *ἵτρο-* by the side of *ἵτρον*, etc. The stem **mermro-* containing a group of three consonants, was relieved to **memro-*, probably before the individual Italian period; cf. in general De Saussure, *Mémoire de la Société de Linguistique*, vi. 246 fg. Italic **memro-* becomes *membro-* as *hibernu-s* for **hībrino-s* for **hīmbrinos* = Greek *χειρ-pwó-s*, as *tüber*, stem **tūbro* for *tūmbro-* = Sk. *tūmra-s* 'fat, strong.' See Louis Havet, *Mémoires de la Société de Linguistique*, iii. 416; Osthoff, *Morph. Unters.* v. 85 fg.²

6. Gothic *fōtus* and *tunpus*.

Of especial interest for the problem which stands at the head of this paper is a small group of words designating parts of the

¹ The Hindus always feel the etymology which they ascribe to the word (root *mar* 'to die'): accordingly, the notion of 'vital part of the body' ever and again crops out in connection with the word. The medical *śāstras* speak of five different categories of *marmān*, which are subdivided so as to amount altogether to 107 *marmāṇi* or vital parts of the body; see Wise, *A Digest of Hindu Medicine*, p. 69 fg.; cf. also Nirukta ix. 28; xiv. 7; Yājñav. iii. 102, and the list of citations from Suśruta given in the *Pet. Lex.* sub voce *marmān*. If the word is proethnic, as is assumed above, their interpretation is secondary, and it may be fairly questioned whether there is any connection at all with root *mar* 'to die.'

² Possibly **mermro-* survived until the early Italic period, producing **membro-*, losing its *r* after the development of the transitional *b*, just as in a later Italic period Lat. *marmūr-*, **marmr-* yielded French **marmbre*, which was relieved by the loss of the *m* in modern *marbre*.

body in Gothic and other Germanic dialects. The question has often been asked why the I. E. stem. *pōd-* foot, Proto-Germanic *fōt-*, should have become *fōt-u-s* in Gothic. The comparison with the Vedic *अप. लय. pād-ū-s*, glossed by Durga at Nirukta v. 19 with *jangamana* 'course,' has but little in its favor. The view, formulated most clearly by Bernhard Kahle, *Zur Entwicklung der Consonantischen Declination im Germanischen*, p. 9 (cf. also Brugmann, *Grundriss* ii. p. 450), is now generally accepted. According to Kahle, the *u*-inflection of the Gothic stem began in the acc. sg. and pl.: *fōtu* = Proto-Germ. *fōtum* = I. E. *pōdm*; *fōtuns* = Proto-Germ. *fōtuns* = I. E. *pōdn̥s*. These forms coincided with the corresponding cases of *u*-stems, and furnished the point from which the old consonantal declension could slip over into the *u*-declension.¹ But it is not a little striking, in the light of our investigation, that the Gothic word for tooth has the very same inflection: nom. *tunpus*, etc. Here also it is perfectly possible that the acc. sg. *tunpu*, acc. plur. *tunpuns*, dat. plur. *tunpum* should have offered occasion for a change from the consonantal to the *u*-declension (see Kahle, p. 15). But whence the coincidence? Why should the same analogy have completely overrun both words independently in Gothic? It must be remembered that in the remaining German dialects the decay of the proethnic consonantal declension of each of these words was followed by an eager line of aspirants from all possible other declensions: *i*-declension (e. g. Ohg. dat. plur. *fuazim*, *zenim*), *n*-declension, *o*-declension, etc.; see Kahle, pp. 8 fg. and 14 fg. It has hitherto passed without notice that in the consideration of these two words their character as designations of parts of the body might play a role, and further that they belong to a group of at least four words of the same category, *handus* hand and *kinnus* chin, cheek being the other two. Of these *kinnus* is certainly the continuation of a pre-Germanic *u*-stem = Gr. *γένυ-s*, Lat. *genu-(inu-s)* 'belonging to the cheek' (*dentes genuīni*); Sk. *hānu-s* 'jaw,'² etc.

¹According to Kahle, pp. 8, 9, the dat. plur. *fōtum* is also an independent analogical intruder into the paradigm: it is made in accordance with the prevailing type of the dat. plur. of consonantal stems *nahtum* = Proto-Germ. **nahtumi* for **nahtymi*; Proto-Germ. *fōtmi* would have yielded **fōtm*, not *fōtum*. This form, therefore, may be added to *fōtum* acc. sg., and *fōtuns*, acc. plur., making in all three *u*-forms as the basis of the entire *u*-declension.

²Goth. *kinnu-s* for **kinnu-s*: the *nn* from oblique cases in which the stem-final came to stand before a vowel: *kinu-* became *kinn-* as *manu* = Vedic stem *mānu-* 'man' became *mann-*, and spread over the entire paradigm.

The word for hand seems to have been originally a consonantal stem which passed over into the *u*-declension, but its transition has been very much more complete than that of the stems for foot and tooth; the *u*-declension of hand was in all probability largely completed in Proto-Germanic times, although here also forms of other declensional types (e. g. Ohg. dat. plur. *hentim*) are not wanting; see Kahle, *ibid.* p. 27. I believe now that the development of the entire group was as follows: Proto-Germanic **kin-u-s* encountered in early German times certain cases of *hand*-which looked like *u*-forms: acc. sg. *handu(m)*; acc. plur. *handuns*; dat. plur. *handum(i)*. The semasiological kinship of the two stems drew on the latter to the approximate completion of its declension according to the *u*-type; these two sought out in Gothic two more designations of parts of the body, *fōt-* and *tunþ-*, the way being again prepared by the existence in each of the ambiguous forms, the acc. sg. and plur. and the dat. plur. (see above). One may venture to intimate still more precisely that *kinnus* completed the development of *tunþus*, and *handus* the development of *fōtus*, since tooth and jaw, hand and foot have special affinities and were doubtless often mentioned in pairs. The difference in the gender, *kinnus* and *handus*, feminine; *tunþus* and *fōtus*, masculine, presented no difficulty, since fem. and masc. *u*-stems in Gothic are inflected precisely alike; as far as the Gothic documents in our possession are concerned we may remember that *kinnus* and *handus* render the Greek feminines γένυ-ς and χεῖρ, while *fōtus* and *tunþus* reproduce the Greek masculines ποῦς and ὀδούς.¹

¹ Further instances of the adaptation of suffixes designating parts of the body may be contained in the following cases: Vedic *sānu-*, *śnā-* back, which I would compare with Gr. *vōssa* for *συν-κία or *συν-τια 'turning-point,' lit. 'that to which the back is turned,' and Lat. *sinu-s* 'curve, bosom,' is of a structure very parallel to *jānu-*, *-jnu-* knee, Gr. γόνυ, γνύ-ξ. These two pro-ethnic stems are not only both designations of parts of the body, but they share also the notion of 'bent surface, curvature'; it seems likely that the special structure which separates these two groups from all others is due to some extent to mutual assimilation. Possibly Vedic *gṛṅga* horn owes its difficult secondary suffix *-ga-* (cf. Lat. *cornu*, Goth. *hairn*, Runic *horna*) simply to Vedic *dṛṅga* limb; the meanings are again peculiarly near each other. This explanation seems to me not less plausible than that advanced by Kluge, Festgruss an Böhtlingk, p. 60. The frequent parallelism in the form of words for eye and ear has been noted; see, e. g. Schmidt, Pluralbildungen, pp. 250, 389, 406. The same scholar, *ibid.* 250, note, assumes the influence of the Vedic dual *akṣyāu* 'the eyes' upon Vedic *sakthyāu* 'the thighs'; the meanings are quite as far apart as those of ὀδούς and ποῦς, *fōtus* and *tunþus*.

7. Excursus on words for right and left.

À propos of Gothic *handus* a few remarks on words for right and left. The words for right from the root *deks* show an astonishing variety of suffixes, though the meaning is apparently the same. They may be grouped as follows:

Suffix -ino-.	Suffix -uo-.	Suffix -tero-.	Suffix -xo-.	Suffix -tmmo-.
Sk. <i>dākṣiṇa-</i> .	Goth. <i>tahsua-</i> .	Lat. <i>dexter</i> .	Gr. <i>δεξιός</i> .	Lat. <i>dextimus</i> .
Zd. <i>dašina-</i> .	Ohg. <i>zēso</i> (gen. <i>zēsues</i>).	Gr. <i>δεξιτερός</i> .		
Ohg. <i>desinā</i> .				
Lith. <i>dessinē</i> 'right hand.'	Old Ir. <i>dess</i> .			
	Cymr. <i>dehou</i> .			

Some of these are secondary: Lat. *dextimus* presents the superlative suffix -*tmmo-* in addition to the comparative -*ero-* in *dexter*, perhaps after such a proportional analogy as *inferus* : *infimus* = *dexter* : *x*, i. e. *dextimus*. Greek *δεξιτερός* right is certainly formed secondarily after its opposite *αριστερός* left. On the other hand, *δεξιός* and *dexter* represent old comparative formations whose antiquity there is no reason to doubt. Most noticeable are the forms in -*uo-*: Brugmann, *Rheinisches Museum*, vol. lxiii 401 has suggested that these are imitations after the opposite words for 'left,' represented by Lat. *laevo-s* = Gr. *λαί-(F)ός* = Ohg. *lěvū*; Lat. *scaevo-s* = Gr. *σκαί-(F)ός*. I would suggest a somewhat broader basis which shall include both manifestations of the suffix -*uo-*: while -*tero-* and -*xo-* are original comparative suffixes, the suffix -*uo-* is a broader suffix of direction. *Comparison* and *direction* (e. g. Sk. *dākṣiṇa-* 'south'; Old Ir. *dess* 'south'; *σκαίός* 'western') are the two prominent phases of the function of the words of this category. In other words, I would see in the suffix -*uo-* in words for right and left the suffix which appears in I. E. *ṛdh-uo-*: Vedic *ūrdhvā-s* 'upright,' Gr. *ὀρθ-(F)ός* 'upright,' Lat. *arduo-s*, etc. In Vedic writings, e. g. AV. iv. 40; Kāuṣika-sūtra 116. 3 *ūrdhvā* is a designation of direction (*ūrdhvā dīṣ*) by the side of *prācī*, *dākṣiṇā*, *praticī*, *ūdicī* (*dīṣ*); two more designations of direction in the same lists *dhruvā* and *vyadhvā* seem to exhibit the readiness with which this suffix adapted itself to words of direction. This point of view accounts also, we believe, for the appearance of the suffix -*uo-* in the two oldest I. E. words for all, *soluo-*: Gr. *ὄλο-s* and *ὄλο-s*, Lat. *salvo-s*, Sk. *sarva-*, Zd. *haurva-*, etc.; and *uikuo-*: Sk. *viśva-*, Zd. *viśpa-*. These also were words

of direction. Only it may be questioned whether Sk. *viśva-* and Zd. *viśpa-* are not themselves secondary assimilations to *soluo-* undertaken by these two languages independently, since Achemenidan *visa-* and Obg. *visi* exhibit no trace of the *u*. In the earliest Indian writings *viśva-* and *sarva-* jostle each other: the RV. has *viśva-* more frequently than *sārva-*; later *sārva-* gains the upper hand.

Brugmann, *ibid.* p. 399 fg., observes that a large number of words for 'left' are derived from roots expressing the idea of 'good, favorable, desirable, of good omen.' Upon this I would base the etymology of Vedic *savyá-* = Zend *havya-* 'left.' The older identification with *scaevo-s*, *σκαῖό-s*, Fick² i. 228 (cf. Curtius, *Etym.*⁵ 166) is not tenable; *sk* does not become *s* in Vedic or *h* in Zend, nor does Greek *σκαῖό-s* exhibit epenthesis of *i*. I regard *savyá-* as a derivative with comparative suffix *-iō-* from *sū* 'good,' just as *návya-* 'new, recent' is made with the same suffix from *nū* 'now.' Cf. Vedic *vāmá-* 'good' and *vāma* 'left.' Is Gothic *hleid-uma-* 'left' to be compared with a supposable Sk. **grī-tama-* 'best'? The *d* (ð) in *hleiduma-* before the ordinary superlative suffix *-uma-* (*-mmo-*) would then perhaps be due to adaptation from other superlative words of direction, e. g. Ags. *sīð-em-(est)*. Or is it simply a word of direction, containing the root I. E. *klei* 'to lean,' and connected with Ohg. *(h)lī-ta* 'inclined plane'; cf. κλῑ-τύ-s 'hill'? cf. Brugmann, *Grundriss* ii. p. 159. In that case also the connection between *hleiduma* and words like *sīðem-(est)* seems very likely.¹

8. Assimilation of opposites, and assimilation of congeners.

If it shall turn out that the explanations offered in the preceding pages are true, we may allow ourselves to dwell for a moment upon the principle which they involve. In our opinion, this method of investigation is of great importance. It has been known for a long time that words of opposite value exert an attractive influ-

¹ Wackernagel, KZ. xxix. 134 has rendered likely that *χερσ-* is the stem for 'hand' in Greek. Can a bridge be built between this and Aryan **hastā-*, Sk. *hāsta-*, Zd. *zasta-*, Achemenidan *dasta-*? I. E. **ghers-to-*, relieved of its *r*, one of three consecutive consonants, would yield *ghes-to-*. Such is the treatment of the group *rst* in Latin: *to(r)stus*: *torreo*, etc., Stolz, *Lat. Gr.*² §65. 3d, p. 313. Possibly, Vedic *kīstā-* 'singer, poet' may come from *kī(r)stā-* in some pre-Aryan period of speech, cf. *kīrti-* 'praise,' thus illustrating the same phonetic process.

ence upon one another,¹ and this knowledge has been used to good purpose, growingly year by year. The reason for this has, however, largely escaped notice: opposites attract each other because they belong semasiologically to the same class. Now, just as it is a sound mode of procedure while watching the historical change or development of a certain word, to keep an eye constantly upon the parallel development of its opposite or its opposites, so it is true method to consider all the members of that broader class of which the word and its opposite form are but single representatives. Let me illustrate by a new example which seems to me especially well calculated to place this point into the right light. The ordinary word for white in the Veda is *çvetá-*, a prehistoric word, comparable with Obg. *svētū* 'light,' and less directly with Goth. *hveit(a)-s* 'white.'² By its side stands a rarer word with a slightly differentiated meaning *çyetá-* white, reddish-white, which looks altogether as though it were merely a modification of *çvetá-*; certainly no independent etymology for the word can be found. I would suggest that *çyetá-* is a modification of *çvetá-* after it had fallen under the influence of its opposites *çyāmá-* and *çyāvā-* black, dark. Thus much for the influence of these opposites upon one another. Now, this secondary word *çyetá-* white, duly takes a place among words of color in general, and forms a feminine *çyēnī* in accordance with the far-reaching fact—itsself no doubt due to adaptation—that color-words ending in *-ta-* make feminines in *-nī*; see below under paragraph 11, p. 26. But once more, the regular feminine of *çvetá-* is *çvetā-*: the word in this form has not obeyed

¹ Of the literature on this subject, which is constantly growing, I will point out only the following: Osthoff, *Morphologische Untersuchungen*, ii. 35; Wackernagel, *KZ.* xxv. 289 fg.; Brugmann, *Berichte der Kgl. Sächsischen Gesellschaft der Wissenschaften*, 1883, p. 191 fg.; Stolz, *Wiener Studien*, ix. 305; Wheeler, *Analogy* (Ithaca, 1887), p. 19; Brugmann, *Grundriss*, ii. 110, 292, 453 note 2, 465; Joh. Schmidt, *Pluralbildungen*, 207, 212 note. To the scant list of cases of syntactical analogy of opposites I would add Eng. *differ* with, which is a modification of *differ* from made in deference to the form and the meaning of *agree* with; to *differ* with means not to *agree* with; it never means to *differ* in form, character, etc. Does Greek *ἀλλοτός* owe its *v* to the influence of the stem *ἡδύ-*?

² It looks as though Proto-Germ. **hveita-s* from I. E. **kueito-s* owed its *t* instead of *p* (**hveipa-s*) to the analogy of its opposite **svarta-s*, I. E. **suordo-s*. Note Goth. *hveits* and *svarts*; Old Norse *hvittr* and *svartr*; Old Saxon *hwit* and *swart*; Middle English *hwit* and *swart*, etc.

the call of the adaptive law of the feminines just now alluded to. Yet Vopadeva iv. 27 reports a feminine *gyenī*, which is likely enough to have been formed somewhere or other in deference to the special inducement offered by that fem. *gyenī*, which itself sprung from the loins of *gyetā*: truly a clear illustration of the influence of an opposite blending with the influence of a congeneric word into one composite result. I believe that the presence of this principle in the minds of those who investigate the history of words will be found more and more a means of saving much acute but futile phonetics, and I hope to add a few more illustrations of this point in the sequel of this article. All this is of especial importance in the study of the history of noun-suffixes; the suffix must be considered from two leading points of view: first, in the light of the entire mass of material which has the same and related suffixes; secondly, in the light of the semasiological category to which the word belongs. Kluge, in his *Nominale Stammbildungslehre der Altgermanischen Dialecte*, has emphasized the latter point of view perhaps a little too much at the expense of the former; Brugmann, in the second volume of his *Grundriss*, has emphasized the first at the expense of the second; only an appendix (ii. pp. 419 fg.) deals with the semasiological categories. Even this, however, is full of suggestion, as is everything which comes from the pen of this gifted scholar.

9. Designations of birds, animals, and plants in Greek.

In Brugmann's discussion of the Greek suffix *-ko-, -k-* (nom. *-ξ*), *ibid.* pp. 243, 255, 257, there is no indication of the fact that this suffix is largely pre-empted by designations of animals, especially birds and plants. Thus:

1. Birds: *γλαυξ* owl; *ίεραξ*, *ίρηξ* hawk; *ίρυξ* (*ίβρυξ*) wryneck; *καύαξ*, *κηϋξ*, *κήξ* sea-gull; *κόκκυξ* cuckoo; *κόραξ* crow; *κρέξ* = Lat. *crex*; *ζορνυξ* quail; *πέρδιξ* partridge; *ψήληξ* combless cock.

2. Other animals: *αἶξ* goat; *άλώπηξ* fox; *ασπάλαξ*, *σπάλαξ* mole; *βόαξ* a fish; *βόμβυξ* silk-worm; *δελφαξ* pig; *λάβραξ* sea-wolf (fish); *λάλαξ* croaking frog; *λείμαξ* snail; *λύγξ* lynx; *μύρμηξ* ant; *πόρταξ* calf; *πρόξ* roe; *πτώξ*, *πτάξ* hare; *σκύλαξ* puppy; *σκώληξ* worm; *σφήξ* wasp; *τέττιξ* grasshopper; *ὑστριξ* hedgehog; *φοῖνιξ* phoenix. Persian *spaka*-dog promptly becomes **σπάξ*, acc. *σπάκα*, Hd. i. 110.

3. Plants and the like: γλώξ beard of corn; δόναξ, δοῦναξ reed; ἀνθήριξ beard of corn; θρίδαξ lettuce; λάριξ lark-tree; νάρθηξ ferula; ὄμφαξ unripe grape; ὄρπηξ shoot; ῥάξ, ῥώξ berry, grape; σμίλαξ yew; φοῖνιξ palm. Cf. also κάλυξ bud.

Even a superficial survey of these lists shows that there must have existed in the speech-sense of the Greeks the feeling that the suffix -ξ (nominative) was especially fit for designations of animals and plants, in other words that the suffix had adapted itself definitely to such use. Further, a glance at Kluge, *Stamm-bildung*, §61, p. 29, shows that the germs of this adaptation are pre-Hellenic. Ohg. *chranuh* kranich; Goth. *ahaks* dove; Ohg. *habuh* habicht, hawk; Ags. ruddoc; Middle Engl. puttock; Engl. pinnock exhibit the same suffix adapted to the same function, well established in German.¹ In all likelihood the adaptation of this suffix to the designation of birds began in proethnic times, and was emphasized anew in Greek and German; cf. Armenian *kʻrunk* = Ohg. *chranuh*; ὄρνιξ = Sk. *vārtikā*, *vartaka*-. A survey of the Greek list of names of birds suggests furthermore one or two interesting details and questions. Brugmann, *Grundriss* ii. 243, suggests that ν of ὄρνιξ may be due to the ν of κόκκυξ, ἰβυξ, etc., the Sk. having a before the k (*var-taka*-.). Very likely, and I would suggest the same explanation for the ν of πτέρυξ wing. Joh. Schmidt, *Pluralbildungen*, p. 176 note, assumes that πτέρυγ- is a cumulative analogical formation (syncretic analogy), the result of two prehistoric stems, one having the final I. E. 3 without preceding u (Zd. **pterej*-, Old Netherl. *fetherac*); the other ending in u without the guttural (represented by Vedic *patāru*- 'flying'). Far simpler and quite as likely seems to me the assumption that some word for 'wing,' either *πτερό-ν* or a stem ending in a guttural not preceded by u, fell under the influence of bird-names in νξ, borrowing from them either the entire suffix -νξ or at least the ν. Bird and wing approximate one another about as closely in meaning, e. g. as night and sleep, whose similarity in meaning Joh. Schmidt, *ibid.* p. 212 note, employs to account for the formation of Vedic *svapṇayā* in sleep, after the pattern of *nakṭayā* by night. Again, the ν of nom. ὄνυξ claw, nail may in its turn have been influenced by πτέρυξ and the names of birds in -νξ: the ν is in some

¹ For other designations of animals in German by definite suffixes which have no doubt spread by adaptation, see Kluge, *ibid.* §§3, 6, 18, 28, 34, 84, 100. Cf. also in general below, p. 24 fg.

way or other secondary; cf. Sk. *nakhá-s*, Ohg. *nagal*, Lat. *unguis*, Lith. *naga-s*, etc. Similarly the word for egg, Ohg. *ei*, plur. *eigir* (Nhg. *ei*, *eier*) follows the adaptation of the I. E. suffix *-os*, *-es*, Proto-Germanic *-az*, *-iz*, which begins to play the role of a plur. suffix, at first largely in designations of animals, e. g. Ohg. *kalb*, plur. *kalbir* calf; see Kluge, *ibid.* §84; Brugmann, *Grundriss*, p. 395.

10. Designations of divisions of time.

That a chain of adaptation started to bind together in some early period of I. E. history the designations of seasons and divisions of time has, as far as I know, hitherto not been observed, or distinctly stated. The metaplastic declension in *-r* and *-n*, the same which proved so active in bringing together the designations of members of the body, has gained quite a considerable footing within this semasiological category. An old declension **vēser* or *vēsṛ* (casus recti), **vēsnés* seems to lie at the base of the multiform representatives of the I. E. word for spring. The *r*-stem appears in Greek *ἐαρ*, *ἦρ*, Lat. *vēr* (Brugmann, *Grundriss* i. 430), Old Norse *vār* (Schmidt, *Pluralbildungen*, p. 201); Zend *vañhr-i* (Zend-Pahlavi glossary); Lith. *vasar-à* 'summer'; perhaps also Vedic *vasar-hā* (Ludwig, *RV.* vol. iv. 191; Bartholomae, *Bezz. Beitr.* xv. 15). The *n*-stem is at the base of Obg. *vesn-a* and Vedic *vasan-tā*-spring.

The word for winter has developed early, though possibly secondarily, the same double suffix: *-r* in Greek *χειμῆρ-ωó-s*, Lat. *hibernus* (cf. above, p. 11), Armenian *jmeṛ-n*, gen. *jmer-an*; the *n*-suffix in Vedic *hemán-*, *heman-tā-*, Gr. *χειμα*, *χειμών*, Arm. *jiun* from **jivan* = **jiman*; see Hübschmann, *Armenische Studien*, p. 18, Nr. 12; p. 40, Nr. 178. The additional suffix with *n* in Arm. *jmeṛ-n*, *jmer-an* may represent the blending of the oblique *n*-cases with the casus recti in *-r*. The *r-n* suffix appears also in Arm. *amar-n*, gen. *amar-an* summer, the stem *amar-* being = Ohg. *sumar* (cf. Ved. *sámā* 'year,' Zend *hama* 'summer'); *-r* and *-n* are blended in this Armenian word just as in the word for winter. The word for night exhibits the *r*-stem in *νύκτωρ*, *νυκτεπ-ís*, *νυκτεπ-ωó-s*, Lat. *noctur-nu-s*, Zend *nahtare* in *nahtourušu* (Bartholomae in *Bezz. Beitr.* xv. 19); the *n*-stem in the solitary Vedic *nakṭá-bhis* (*RV.* vii. 104, 8 = *AV.* viii. 4, 18) which Joh. Schmidt, *KZ.* xxvi. 18, and *Pluralbildungen*, p. 212, identifies with Goth. *nahtam* (*n*-stem). It has occurred to me that *nak-tábhīs* by night might be the analogical opposite of *áhabhīs* by

day (see below, p. 22), but the difference in the accent renders this unlikely; the accent of *naktābhis* is the old accent of the oblique cases, that of *āhabhis*, as well as the entire stem *āhan-*, seems to have followed the analogy of *āhar* and *dhas* (*āhobhis*). Goth. *nahtam* could also be imagined as the opposite of the *o*-stem *dagam*, but for Goth. *nahta-mats* 'supper,' which, like Goth. *auga-daurō* 'window' (cf. dat. plur. *augam*), has propagated the inorganic representatives of the *n*-stem: the *n*-stem seems therefore to be old.

The heteroclititic declension appears most clearly in Gr. *ἡμᾶρ* (*ἡμέρα*), *ἡμᾶρος* day; Vedic *āhar*, *āhn-as* (Zend loc. *asni*) day; Zd. *ḥšāpare*, gen. *ḥšāfnō* night, Vedic *uṣar* dawn (extended to the oblique cases, gen. *usrās*); cf. also *vāsarā-* early; Lith. *auszrā*, Gr. *ἥρι-ος*, *αὔρι-ος*, *ἥρι* in the morning: a trace of the *n*-stem perhaps in Zend *uṣānō* (= **uṣānō*), according to Geldner, Bezz. Beitr. xiv. 1. The *r*-stem without the *n*-stem is found in Zd. *ayare* day;¹ Zd. *yāre*, *yāra-* year, Goth. *jēr*, Gr. *ἔρᾱ*, Obg. *jarū*, *jara*; further in the German stem for winter in Ohg. *wintar*, Ags. *vinter*, Goth. *vintr-us*; and for summer: Ohg. *sumar*, Ags. *sumer*; see Kahle, *ibid.* p. 18; Kluge, *Stamm-bildung*, p. 2; Schmidt, *Pluralbildung*, p. 207. The *r*-stem appears also in Vedic *vatsarā-* year, by the side of *vatsd-* 'yearling calf' and Gr. *Fétos*: cf. Cu. Etym.² p. 208; Hübschmann, *ibid.* Likewise in Latin *vesper*, *vespera*, Gr. *ἑσπῆρα* evening, parallel but not identical with which are Lith. *vākara-s*, Obg. *večerū* 'evening': the suffix is the same as that of the Greek and Latin words. Cf. Schmidt, *ibid.* p. 18 note. Further, Ohg. *demar* 'crepusculum,' *demer-ungō* 'crepusculum' seems to hold the same relation to Ved. *tāmas* as *uṣar-*: *uṣas*, above; see Schmidt, *ibid.* p. 206. Here also belong Ohg. *wetar*, Ags. *weder* weather; cf. Obg. *vedro* hot weather; perhaps likewise the adverbially employed stems, Vedic *mūhur* quickly (cf. *muhūr-tā* moment); *sabar-* at once, in *sabar-dhūk* (nom.), *sabar-dūgha-* 'giving milk at once'; Ved. *pūnar* again; Zd. *iṣare* at once; Gr. *ἄφᾱρ* immediately, of which the corresponding *n*-stem may be contained in *ἄφᾱ-ω* of a sudden.³

¹ Schmidt, *Pluralbildungen*, p. 216 note, assumes that this word is the Zend representative of Vedic *āhar*, having changed its true form **azar* (cf. loc. *asni*) perhaps under the influence of *yāre* year. Cf. also *ayara-* 'genius of the day.'

² Very different etymological views in reference to this word have been advanced by Froehde, Bezz. Beitr. x. 294; Bartholomae, *ibid.* xv. 17; Schmidt, *Pluralbildungen*, p. 516 note. Cf. also Kretschmer in KZ. xxxi. 351.

The process of adaptation of the suffix to words for division of time obtained an additional impetus from their secondary adjective derivatives in *-ino-*; this, by clipping the final *r* of the stem, yielded *-rino-*, and seems to have become independently productive in proethnic times. The representatives of this formation are restricted to Greek and Latin: *ἐαρινό-s*, *χειμερινό-s* (cf. *θερινό-s*), *νυκτερινό-s*, *ἡμερινό-s*, *ἑσπερινό-s*;¹ Lat. *vĕrnu-s*, *nocturnu-s*, *diurnu-s*, *vesperna*, *hibernu-s*.²

¹ Suff. *-ino-* also exhibits in Greek signs of independent productivity as a means of making derivatives from words for divisions of time: *δειλινό-s*, *περυσινό-s*, *θερινό-s*, *ὀπωρινό-s*, *ἑωθινό-s*.

² Of recent years the view has been expressed with growing confidence that the *r*-stems in the heteroclitic declension in *r-n*, and elsewhere, are in reality case-forms with original locative value, which have been made the basis of a more or less complete declensional system. Thus recently Bartholomae, *Bezz. Beitr.* xv. 14 fg.; Johansson, *Gött. Gel. Anz.* 1890, Nr. 19, p. 774. At the base of this view seems to lie the consideration that designations of time, space, and parts of the body are peculiarly addicted to such declensional methods (Johansson, *ibid.*). In the case of words for time and space which are a priori very liable to be employed in the locative, a certain degree of plausibility attaches to this view. But how about designations of parts of the body? Is it at all likely that the I. E. form, represented by *ἥπαρ* = Lat. *jēcur* = Sk. *yakṛt*, etc., ever meant in proethnic times 'in the liver,' though no such case value is ever attached to it in any period of I. E. speech? And why should the declension of the *casus recti* of the word for water *ὕδωρ* = Ohg. *wazar* have developed paradoxically out of the locative, the *casus obliquus* par excellence? There are a plenty of other words in *-p* which have nothing to do with time, space, and parts of the body. I will mention from the Greek, without aiming at exhaustiveness: *ἄλειπα*, -ατος 'wheaten flour'; *ἀλειφαρ*, -ατος 'unguent'; *ἄλκαρ* indecl. 'bulwark'; *δέλεα*, -ατος 'bait'; *εἰλαρ*, -ατος 'covering'; *ἐελδωρ*, *ἐλδωρ* 'desire'; *ἐλωρ*, -ωρος 'booty'; *κέλωρ*, -ωρος 'son'; *κτέαρ*, -ατος 'possessions'; *λῦμαρ* 'filth'; *μάκαρ*, -ατος 'blessed'; *μηχαρ* 'expedient'; *μῶμαρ*, *μῦμαρ* 'blame'; *νέκταρ*, -ατος 'nectar'; *δαρ* (*ῶρ*), *δαρος* 'consort'; *ὄναρ* 'dream'; *ὄνειπαρ*, -ατος 'food'; *πεῖραρ*, -ατος 'end'; *πέλωρ* 'monster'; *πίαρ*, indecl. 'fat'; *σάκχαρ* 'sugar'; *στέαρ*, -ατος 'tallow'; *τέκμαρ*, *τέκμωρ* 'boundary, aim'; *ὕπαρ* 'waking vision'; *φρέαρ*, -ατος 'well.' Cf. also e. g. Lat. *iter*, *itineris* 'way'; *cicer*, *cicēris* 'pulse'; Ags. *tiber*, *tifer*, Ohg. *zēbar*, Nhg. *ziefer*, *ge-ziefer*, *un-ge-ziefer*, as specimens from languages outside of Greek. These words, many of them old, exhibit the greatest variety of meanings, and the association of their *r*-forms with the locative can be undertaken only with utter disregard of their face-value. Bartholomae, in another little article entitled 'Arische lokative mit *n*,' *ibid.* p. 25 fg., goes still farther and assumes that the *n*-cases of the heteroclitic declensions in *r-n* also grew up on the basis of a locative in *n*, and he does not hesitate to take very sturdily the consequences of this view: they may be stated by saying that the entire declension of the words for 'liver,' *ἥπαρ*, -ατος, etc., or 'blood,' Vedic *dsrj*, *asnds*, etc., has grown up on the basis

Words for seasons and divisions of time also present here and there minor adaptive groups or instances of assimilation of single forms. It is certainly not accidental that *vasantā-* spring and *hemantā-* winter are formed exactly alike; as far as the secondary *-tā-* is concerned one may mention *muhūrtā-* moment in the same connection. The suffix *-īṇa-* occurs in Vedic *saṁvatsarīṇa-* yearly and *prāvṛṣṇam* (sc. *āhar*) belonging to the rainy season, *varṣa*. The identity of the endings in *au(c)tumnus* and *vertumnus* may not be altogether accidental. The suffix *d* of Sk. *ṣarād* autumn is repeated—not accidentally it may be supposed—in Ohg. stem *lengiz-*, Ags. *lenct-en*, spring, lent; it is to be noted that to our conception these two words for season are opposites, though they were probably not felt to be so in the region of the earth in which they were formed. The assimilation of opposites is especially frequent in names for divisions of time: Armenian *jmeṛn* and *amaṛn* winter and summer (cf. above) palpably exhibit similarities of structure too close to be accidental. Brugmann, Grundriss ii. p. 453, note 2, even assumes that the *m* in the words oldest I. E. stem for winter, Lat. *hiem-s*, etc., has come in the place of *n* owing to the *m* of the I. E. stem *sem-* summer. The German words for summer and winter often influence the gender and declension of one another; see Kahle, *ibid.* p. 20; Schmidt, *ibid.* p. 207. It is now well known that Lat. *diurnus* is patterned after *nocturnus*, while on the other hand *noctū* is patterned after *diū*; that Ohg. *dinija* by day is formed after *noštija* by night; that both ending and gender of Ohg. *tages* have passed over to Ohg. *nahtes*; that the stem Vedic *doṣās-* evening is a transformation of *doṣā* after the analogy of *usās-* morning, at AV. xvi. 4, 6; see Brugmann, *Berichte der Königl. Sächs. Gesellsch.* 1883, p. 192; Schmidt, *ibid.* p. 207. The solitary form *naktābhis*, RV. vii. 104, 18 = AV. viii. 4, 18, may possibly, though

of original locatives. One may ask whimsically how often the ancient Indo-Europeans, who were scarcely advanced bacteriologists, had occasion to employ the expression 'in the blood.' The verisimilitude of this entire line of theories seems to lie solely in the fact that the suffixes *-n* adapted themselves very early to designations of time and space; here locative function prevails. When winter, or summer, day or night are mentioned in simple non-reflective language it is naturally and almost always 'in winter,' 'in summer,' 'by day,' 'by night,' and the investigator may be led to seek the cause of this preponderating, but accidental locative function in any marked peculiarity of form, although this peculiarity may be due to a totally different line of historical causes.

not probably, turn out to be an analogical opposite of *dhabhis* (see above, p. 19).

II. Adaptation in other substantival categories.

In the following we shall assemble a few additional cases of the adaptation of suffixes from various quarters of I. E. speech. No attempt to exhaust the subject in any direction is intended; my object is rather to put into stronger relief the explanations suggested in the preceding pages, and, what is more important, to push forward to a more prominent place this mode of inquiry, whose ideal outcome is to decide in investigation the fate of no word without having first surveyed the whole line of its lexical relatives.

The authors of the Sanskrit lexicon of the Petersburg Academy were first to indicate that adaptation was at work very early in establishing the prevailing forms of the earliest I. E. category of nouns of relationship. In Vol. iv. p. 690a, note (s. v. *mātār*), they say: '*pītar* and *mātār* sind zwar urindogermanisch, aber schwerlich die ältesten namen für vater und mutter. Diese werden *pa* und *mā* oder ähnlich (vgl. *tata* und *nanā*) gelautet haben, und diese naturlaute mögen in einer späteren schon reflectierenden periode der sprache bei der bildung von *pītar* und *mātār* maassgebend gewesen sein.' From proethnic times come the words of relationship *pātēr*- father, *mātēr*- mother, *bhrāter*-, *bhrātor*- brother, *dhughātēr*- daughter, *suēsor*- sister; *daiuēr*- (*δῆῖρ*, Lat. *lēvir*) husband's brother; the stem corresponding to Vedic *yātār*-, Gr. *elvatēp*-es or *elvatēp*-es, Lat. *janitr-ic-ēs* brothers' wives (strong stem *ēnāter*-; weak stem *iñtēr*-); and the stem corresponding to Vedic *jāmatar*- (*vi-jāmātār*-) son-in-law (cf. γαμβρός).

We may regard it as certain that the spread of the suffixes *-ter*-, *-er*- over this category began with some one or two words of relationship, in which the suffix had the ordinary function of agency, without, of course, any implication of relationship. The word for father seems to have the best claim to be considered the originator of the category: *pātēr*- seems to contain the same root as *pó-ti-s* (Sk. *pāti-s*, *πῶσι-s*) husband and *nē-pōt* nephew, grandchild (cf. Leumann in Festgruss an Böhtlingk, p. 77). By the side of *pātēr*- 'protector,' used as a frozen epithet of father, stood *pā*, the I. E. 'lallwort' for father. By proportional analogy the 'lallwort' for mother would give rise to *mātēr*- (*pa* : *pātēr* =

mā:x, i. e. *māter*).¹ The propagation of the suffix after that would be a natural consequence.

Especially interesting and corroborative are the cases in which the suffixes or case-endings of the nouns of relationship in *-ter-*, *-er-* make inroads on other nouns of relationship within the history of the individual languages. Thus the Vedic stem *nānādar-* husband's sister, which occurs but a single time at RV. x. 85, 46, is in all probability a tentative formation according to this type.

The stem I. E. *népōt* nephew, grandchild partially passes over into the *r*-declension in Indo-Iranian times: e. g. Vedic dat. sg. *ndptre*, somewhat later (TS. i. 3, 11, 1) acc. sg. *nāptāram*; Zend gen. sg. *nafēdrō-*, acc. sg. *naptārem*. Similarly Vedic *pāti-s* in the sense of husband—not in the sense of 'lord'—has in various cases assumed case-endings like the nouns of relationship, e. g. gen. *patyūr(-us)* like *pitur(-us)*: in this it is followed in a single case by the stem *jāni-* wife, which also makes the gen. *jānyus* in the Veda. These again are followed by *sakhi-* friend, which makes gen. *sākhyus*. The anomalous dat. plur. *viāoi* (for **viāoi*) unquestionably follows *parpāoi*, *thyarparpāoi*; cf. Wackernagel in KZ. xxv. 289. Possibly the Germanic forms corresponding to I. E. *daiuēr-* brother-in-law which exhibit a guttural, Ags. *tācor* and especially Ohg. *zeihhur*, are indebted to forms of I. E. *svekuro-* father-in-law for its appearance. Cf. especially Ohg. *svēhur*.²

An I. E. secondary suffix *-bho-* is employed extensively in Sanskrit and Greek for the formation of names of animals. Thus, Vedic or Sanskrit *vṛṣabhā-* and *ṛṣabhā-* bull, *ṣarabhā-* a fabulous animal, *gardabhā-* and *rāsabha-* ass, *ṣerabha-* snake, and a list of eight others offered by Whitney, Sk. Gr.³ 1199a. In

¹ Cf. the somewhat different view advanced by Delbrück, Die Indogermanischen Verwandtschaftsnamen, p. 68 fg. Delbrück records the interesting observation that the word *pitr-* never means 'progenitor' in the Rig-Veda.

² Note in this connection the little Germanic category formed with a suffix containing gutturals to express collectives from nouns of relationship: Goth. *brōprahans* brothers; Old Norse *feðgar*, plur. tant. masc. father and son; *moðgur*, plur. tant. fem. mother and daughter, and the neuter pluralia tant. *feðgin* father and mother; *moðgin* mother and son; *systkin* brother and sister, *frippegen* pair of lovers. See Kluge, Stammbildung, §68a; Schmidt, Pluralbildungen, p. 16. No one seems to be able to point out the exact source of this adaptation. For other designations of relatives, etc., see also Kluge, ibid. §§25, 26.

Greek *ἐλαφο-s* deer; *ἐριφο-s* young goat; *κίραφο-s* fox; *κόραφο-s* raven; *κάλαφο-s*, *ἀσκάλαφο-s* owl, and a few others cited by Brugmann, Grundriss ii. p. 204. Here also it is safe to judge that the ending *-bho-* turned up accidentally in some one or a few designations of animals, and was propagated either in I. E. times or by Sanskrit and Greek, each on its own account. We are not in the position to suggest the starting-point for the development. In Kluge's *Stammbildung* groups of animals formed with one and the same suffix are mentioned in §§3, 6, 18, 28, 34, 84, 100. The most interesting of these are those which are felt to be imbued with such force in the consciousness of living dialects, e. g. *-chs* in Nhg. *ochs*, *fuchs*, *luchs*, *dachs*, *lachs* (cf. K. 34); *-er* in Nhg. *kater*, *biber*, *hamster*, *tieger*, *panther*, *gänser-ich* (late Mhg. *ganzer*, Engl. *gander*), *täuber-ich*, *adler*,¹ *geier*, *sperber*, etc. (cf. K. 34); *-ling* in *sperling*, *hänfling*, *hering*, *gründling*, *gressling*, *saibling*, *bückling*² (cf. K. 100). Unquestionably these suffixes would be put into requisition in modern German if the call for new designations of animals became sufficiently imperative.³

Words for color are especially prone to adaptive influence. In Latin and German the I. E. suffix *-yo-*, intrinsically one of the most nondescript formative elements, develops this special function: *helvu-s* yellow, Ohg. *gelo*; *flavus* e viridi et rufo et albo concretus (Fronto, in Gellius ii. 26, 11), perhaps identical with

¹ A patent case of assimilation to this class: *adler* = Ohg. *adal-ar* 'edel-aar.'

² Possibly another case of assimilation to this class: a variant form of the word is *bücking*.

³ In Vedic *sūkard-* hog, boar I would also see the influence of incipient adaptation. The word is best explained upon the basis of a stem **sū-ka* (cf. Old Welsh *hucc*, Cornish *hoch*: whence is borrowed English hog), i. e. stem *sū-* with the quasi-diminutive suffix *-ko-*, frequent in designations of animals (cf. Persian *spāka* above). This **sūka-* came under the influence of Ved. *vyāghrd-* tiger (cf. also Sk. *mārjārd-* cat): the adaptation may have been promoted by the claims of popular etymology which would gladly seize upon a word *sūkard-*, since it suggests *sū-kard-* 'making the sound *sū*.' My colleague, Dr. H. A. Todd, kindly draws my attention to the following very parallel cases of assimilation in names of animals from the Italian: *n* appears for *l* in *licorno* from *unicorno* unicorn after the pattern of *lifante* = *elefante* elephant: Meyer-Lübke, *Italianische Grammatik* (Leipzig, 1890), §167, end. Also, the two designations of fishes *sargus* and *pagrus* frequently assimilate: Tuscan *parago* to suit *sarago*, and conversely Genoese *sagau* after *pagau*: *ibid.* §295, end.

Ohg. *blāo* blue;¹ *gilvu-s* light yellow; *fulvu-s* reddish yellow (Fronto, *ibid.*); *rāvu-s* grey; *furvu-s* dark. For the Germanic forms, Ohg. *faro* colored; *ēlo*, *gēlo* yellow, *salo* black, *blāo* blue, *grāo* grey; Low Germ. *falo* fallow; Ags. *baso* purple; see Kluge, *Stammbildung*, §186 b.² In Sanskrit the suffix *-ta* (*-ita-*) is adapted to the same use: *hārīta-* yellow, *āsīta-* black, *palīta-* grey, *rōhita-*, *lōhita-* red, *çvetā-* white, *çyetā-* reddish-white, *ēta-*, *vy-ēta-* variegated, *pīta* yellow. These again prevailing and quite irregularly form feminines in *-nī*: *hārīknī*, *āsīknī*, *pālīknī*, *rōhīnī*, and *lōhīnī*, *ēnī* and *vy-ēnī*, *çyēnī*, *çvenī* (the last reported only by Vopadeva): they also have arrived at this uniformity by processes of assimilation, which can be in part traced with considerable certainty; see especially Schmidt, *Pluralbildungen*, p. 398 fg.³

The following additional categories may be mentioned: Words for office in Latin: The denominative verb *jūdicāre*, from *jūdex*, naturally forms an abstract in *-tu-*, *jūdicātu-s* office of judge. Of the same sort are *senātu-s*, *principātu-s*, *ducātu-s*, *pontificātu-s*, none of which have a verb corresponding to *jūdicāre* by their side. The suffix *-ātu-* has adapted itself to independent use as a suffix designating office, carrying with it the lexical value inherent in one or two stems with which it happened originally to be fused. Cf. with this the little groups designating officers, made with the suffixes *-ila-* and *-ana-* in German (Kluge, *ibid.* §§18, 20), of which Eng. beadle, Germ. büttel and Germ. schöffe (gen. schöffen) are modern representatives. A movement in a similar direction is at the base of the Latin group *dominus*, *decanus*, *patronus*, *tribunus*: the primary formation *dominus* (= Sk. *damana-* 'conquering') may have started the category.

¹ I. E. *bhīyo-s*.

² Cf. Engl. yellow, sallow, fallow.

³ It is not at all rare for feminines to enter upon processes of adaptation from which the males are left out. Thus the Vedic, Latin, and Greek suffixes designating female divinities: Vedic *-āyī* and *-ānī* (*agnāyī*, *indrānī*, Whitney, Sk. Gr.³ 1220, 1223b); Lat. *-ōna* in *Bellōna*, *Pomōna*, etc., *-ōnia* in *Feronia*, *Pellonia*, etc.; Greek *-ώνη* in *Διώνη*, *Σιμώνη*, etc. Cf. Göttinger Gelehrte Anzeigen, 1890, Nr. 19, p. 774. The originators of these lines of adaptation are difficult to point out, but we may regard it as certain that there is no intrinsic value in the suffixes which fits them especially for this function. *Διώνη* can be directly compared with Italic *Jānu-s*: the *n* here at least has nothing to do with fem. value. This may have been the originator of its entire class.

Designations of dwelling-places and repositories for various substances: In Greek the suffix *-ών* has adapted itself to such use: *οινών, οινεών* wine-cellar; *παρθενών, παρθενεών* maiden's chamber; *ἀνδρῶν* men's chamber; *ἵππων* stable; *λασιών* place covered with shrubbery; *κερεών* empty room. Cf. with this the Germanic designations of places in which plants grow, formed with the ending *-ahi*, Kluge, *ibid.* §67.

Professor Gildersleeve observes acutely that the suffix *-γξ* in *σῦριγξ* pipe, *σάλπιγξ* trumpet, *φάρυγξ* wind-pipe, *λάρυγξ* throat, *σπηλυγξ* cave owes its considerable scope to adaptation. The notion of hollowness is common to all of them. Cf. the English expressions mouth of a cave, and mouth of a trumpet. This category is of especial interest on account of the comparative remoteness of the conception which binds it together. The Italian builds up on a similarly far-fetched *motif* a considerable class of nouns in *-ime* to designate varieties of ordure, fodder for animals, etc.; see Meyer-Lübke, §509 (I am again indebted to Dr. Todd for the reference): *coacime*, *governime*, *grassime* and *marcime* dung; *fondime* dregs, yeast, *lettime* straw, *mangime* fodder for domestic animals, *pastime* pasture, *becchime* fodder for birds. The link which binds these together is evidently that they are all of them materials handled by the peasant.¹ The particular form which originated the category is again unknown. In this connection I would express my own surmise that the 'secondary' suffix *-ma* of **dacruma*, *dacrima*, *lacruma* tear is borrowed from *spuma* foam: *-ma* as a secondary suffix is otherwise unknown in Latin, and the related words (*δάκρυ*, etc.) show no trace of it anywhere.

Of especial interest is the occasional appearance to a greater or lesser degree of the notion of contempt or disparagement in substantives formed with the same suffix. Such value attaches either altogether or at times to suffix *-ulo-* in Lat. *credulu-s*, *bibulu-s*, *gemulu-s*, *tremulu-s*, *querulu-s*, *perdulu-s*, *sēdulu-s*; it is perfectly evident that the notion of contempt did not dwell originally in the harmless suffix (I. E. *-llo-*), but that it was read into it from one or the other instance in which the root itself expressed contempt or disparagement.² A similarly contemptuous value

¹ Cf. Vedic *purīṣa-* and *karīṣa-* dung, and Çat. Br. ii. 1. 1. 7: *samānaṁ vāi purīṣaṁ ca karīṣaṁ* ca 'p. and k. are the same.'

² Note the full continuance of this special function of the suffix in the English version of the Latin words: e. g. *querulous*, *bibulous*, etc.

seems to have gained something of a start in certain Lat. formations in *-aster*, e. g. *oleaster* wild olive, *pyriaster* wild pear, *porcaster* dirty hog, *filiaster* stepson, *Antoniaster*, *Fulviaster*, proper names with contempt attached; see Archiv für Lateinische Lexicographie i. 390.¹ In Lithuanian also a small group of nouns with suffix *-ėli-* show signs of having started that suffix on the road of development to a suffix of contempt: *netikėli-s* good-for-nothing, *paklydėli-s* crack-brain, *padūkėli-s* maniac, etc.; see Brugmann, Grundriss ii. p. 199. A touch of a similar development seems to crop out also with the Lith. suffix *-ju-*, *ibid.* p. 301. Cf. also the Germanic names for contemptible persons in *-(h)-ard* mentioned by Kluge 32, of which Engl. dullard, slug-gard, bastard, German bankert are modern representatives. I would finally index briefly a small number of German suffixal categories which are scattered through Kluge's *Stammbildung*: designations of relatives and persons pertaining to the house, K. §§25, 26; bastards and the like, 25; names of dynasties, 26; names of divinities and mock-words, 29; designations of male persons in *-ulf*, 32; of female persons in *-hildi*, 52; collectives of human beings, 69, 70; designations of utensils, 81, 85, 89, 90, 91; designations of coins, 100.

Lexical adaptation is by no means restricted to substantival categories: it has, however, its greatest opportunities in that quarter. The κ of $\alpha\upsilon\kappa\text{-}\epsilon\tau\iota$ has passed over to $\mu\eta\text{-}\kappa\text{-}\epsilon\tau\iota$, thus starting, as it were, an element *-keta* in words with negative adverbial value. But it is limited by the small variety of negative stems at the disposal of the language. There is no reason why assimilation should not operate in all kinds of classes of verbs: *verba sentiendi et declarandi*, verbs of motion, verbs of carrying and fetching, verbs for eating and drinking, etc., etc. But the material is evidently less pliable; the number of available present suffixes is too small to permit the endowment of them with any too special value; these exercise a dominating influence on the forms of verbs, so as to render the adaptation of other final sound-groups almost impossible. At least the writer happens to be acquainted only with sporadic instances of assimilation which have not developed into formal categories by sufficiently extensive adaptation. The verb $\eta\tau\tau\alpha\sigma\theta\alpha\iota$ to be worsted, in Sophocles, Thucydides, etc., is a modification of $*\eta\tau\tau\alpha\upsilon\sigma\theta\alpha\iota$ (cf. $\epsilon\sigma\sigma\alpha\upsilon\sigma\theta\alpha\iota$ in Hdt.) after the pattern

¹ This force of the suffix is still alive in Engl. poetaster, etc.

of its synonym *νικᾶσθαι* to be conquered; see KZ. xxx. 299. The verb *δύσγω* in the gloss of Hesychius, *δύσγω· ἀποδύω* is, perhaps, due to the influence of *μίσγω* (Od. σ 49: *ἔσω μίσγεσθαι* 'to enter a house'); see Morph. Unters. iv. 34, note. One of the best cases of this sort seems to me to be the following: the present system *δατέωμαι* to assign a portion is formed from the root *da* after the pattern of *πατέωμαι* = Goth. *fōdjan* feed; cf. KZ. xxvii. 267, note. In Lat. *versātus* dexterous, crafty, a modification of *versātus*, whenever its meaning touches upon that of *astūtus* cunning, artful, this assimilation is restricted to the participle; cf. KZ. xxx. 300. We have recently, in the English of the United States, formed humorously the causative verb *to wine*, i. e. to entertain with wine, after the pattern of the causative *to dine* to entertain at dinner, itself a formation of no great antiquity. The vulgar pronunciation of *catch* is *ketch*, a type of pronunciation which is not extended to the closely parallel forms *hatch*, *latch*, *match*, etc. Possibly *ketch* is due to the influence of *fetch*, although it may be the residue of a form with umlaut = South English *ketch*, etc.; see Trautmann, Anglia iv., Anzeiger, p. 52. No doubt others can be added to this small list, but this is at any rate a rare process in the verb; as far as we know it has led to no adaptation of accidental sound-groups to the expression of definite verbal categories in any older period of I. E. speech.

MAURICE BLOOMFIELD.

II.—ANALOGY IN THE SEMITIC LANGUAGES.

PART II.

The following are the principal instances of analogical formation in the Semitic languages.

CLASS I.

Analogical formations in the inflection of the verb, or in the formation of verbal derivatives with reference to the different classes of verb-stems.

In this class are comprised only such cases as have reference to the different classes of verb-stems. All other cases are placed under their proper heads (Classes II and III).

Division A.

Confusion of the different classes of stems, either in the inflection of the verb or in the formation of verbal derivatives.

In Hebrew the two classes of verbs ל"ה and ל"א are frequently confounded. Sometimes, however, this confusion is due simply to the Massoretic pointing.

ל"ה after the analogy of ל"א.

שָׁנָה 2 Kings 25. 29 'he changed' for שִׁנָּה. So also from the same stem יִשְׁנָה Lam. 4. 1 and יִשְׁנָה Ecc. 8. 1.

יִפְרִיא 'he is fruitful' Hos. 13. 15.

בָּלָא 'to consume' Dan. 9. 24 for בָּלָה (inf. constr. Piel).

מִרְפָּה Jer. 38. 4 'relaxing' for מִרְפָּה (prtcl. Piel).

מִרְבָּה for מִרְה Zeph. 3. 1 'rebellious' (prtcl. Qal) st. מרה.

מִסְלָאִים Lam. 4. 2 'weighed' as if from סָלָא.

תִּלְאִים Deut. 28. 66 'hanging' pass. prtcl. Qal as if from תָּלָא.

So also תִּלְאִים 2 Sam. 21. 12 קרי.

וַיִּחָלָה 2 Chron. 16. 12 'and he was sick' for וַיַּחֲלֶה.

וַיִּחַפְּאוּ 2 Kings 17. 9 'and they covered' as if from a stem חָפָא, for חָפָה.

וַיִּרְא 2 Kings 17. 21 'and he removed' as if from נָרָא, for נִיר from נָרָה.

אֶל־חֶבֶא Prov. 1. 10 'be not willing' as if from a stem אֶבֶא for אָבֶא.

לִירוֹא 2 Chron. 26. 15 'to shoot' as if from a stem יִרֶא for יָרֶא, similarly 2 Sam. 11. 24 and Prov. 11. 25.

לִ"א verbs after the analogy of לִ"ה verbs.

Several forms from כָּלֵא 'to withhold,' 'to restrain,' are formed as if from a stem כָּלֶא, so כָּלֵאחִי Ps. 119. 101 (this, however, may be simply due to the Massorites), כָּלֵחֲנִי 1 Sam. 25. 33, כָּלֵי 1 Sam. 6. 10, יִכְלֶה Gen. 23. 6.

So also many forms from רָפֵא 'to heal' are formed as if from רָפֶא, as רָפֶה Ps. 60. 4. Imperative Qal with vowels as if from רָפֵא.

תִּרְפִּינָה Job 5. 18 'they heal.'

יִרְפֵּי Jer. 51. 9. 2 Kgs. 2. 22. Perfect and imperfect Niphal. יִרְפוּ Jer. 8. 11. Piel.

So also בּוֹטָה Prov. 12. 18 'babblers' from stem בָּטֵא (cf. מִבְּטֵא).

צָמָא Ruth 2. 9 from צָמֵא 'to thirst.'

מָלֵי Ezek. 28. 16 and יִמְלֶה Job 8. 21 from מָלֵא 'to be full' as if the stem were מֵלֶה.

Compare also such infinitive forms as קָרֵא Jud. 8. 1 from קָרֵא 'to call.'

מָלֵא Numb. 6. 5 from מָלֵא 'to be full,' also מְלֵאוֹת Jer. 25. 12, מְלֵאֲתָא Ex. 31. 5.

שָׂנֵא Prov. 8. 13 from שָׂנֵא 'to hate.'

חָטֵא Ez. 33. 12 from חָטֵא 'to sin,' קָנֵא 2 Sam. 21. 2 from קָנֵא 'to be jealous.'

These forms as compared with מָצֵא, etc., clearly show the influence of the analogy of מָלֵא.

The example of חָטֵא, moreover, leads us to suspect that in חָטֵא Is. 65. 20, חָטֵא Ecc. 8. 12, and in other similar cases we have something more than a "confusion due to the Massorites."¹

נִפְלִינִי Ps. 139. 14 and נִפְלִינִי Ex. 33. 16 are from פָּלֵא 'to separate, distinguish,' as if the stem were פֵּלֶה.

נִטְמֵינִי Job 18. 3 from טָמֵא 'to be unclean' as if the stem were טֵמֶה.

So מְצִייתֶךָ 2 Sam. 3. 8 from מָצֵא 'to find' as if the stem were מָצֶה.

¹ It is well known that the verbs לִ"א are in the Mishna regularly inflected as verbs לִ"ה; see Geiger, *Lehrb. zur Sprache der Mishna*, p. 46; Strack-Siegfried, *Lehrb. der neuhebr. Sprache* (1884), §§98c and 105; cf. Wright, *Kohleth* (1883), p. 488.

חָבַה Jer. 49. 10 from חָבָא 'to hide' as if the stem were חָבַה, also חָבַה 1 Kgs. 22. 25. So also נָבִיָּה Jer. 26. 9 and הִנְבֵּאתוּ Zech. 13. 4 from נָבָא 'vaticinatus est' as if the stem were נָבַה (for נָבו).

Similarly הִתְנַבּוּת 1 Sam. 10. 13 and הִתְנַבִּיָּה 1 Sam. 10. 6.

Again, a similar confusion is observed between ע"ע stems and ע"ו stems.

The following forms from ע"ע stems are formed as if from a stem ע"ו :

רָנַן Prov. 29. 6 'he will sing' (st. רָנַן).

רָצַץ Is. 42. 4 'he shall be bruised' (stem רָצַץ). [Cf. Eccl. 12. 6.]

יָשַׁד Ps. 91. 6 'he shall waste' (st. יָשַׁד).

בָּרַר Ecc. 9. 1 'to explore' (st. בָּרַר).

נָנֹז Nah. 1. 12 'they shall be cut down' (st. נָנֹז).

תָּבוֹז Is. 24. 3 'she shall be plundered' (st. תָּבוֹז).

תָּבֹק Is. 24. 3 'she shall be emptied' (st. תָּבֹק).

יָמִישׁוּ Ps. 115. 7 'they handle' (st. יָמִישׁוּ).

מָסַךְ Jud. 3. 24 'covering' (st. מָסַךְ).

תָּעַר Hab. 3. 9 'she was made bare' (st. תָּעַר).

יִהְיֶינָם Hab. 2. 17 'it terrifies them' (st. יִהְיֶינָם).

יָרַע Prov. 11. 15 'he shall be broken' (st. יָרַע).

So also in Syriac these two classes of verb-stems, viz. ע"ע and ע"ו are frequently confused. See Nöldeke's Syriac Grammar, §§ 58, 105, 126 B, 174 E, 175, 176, 177 A for these and similar instances in Syriac.

The following forms from ע"ו stems are formed as if their stem were ע"ע.

שָׁב Josh. 2. 16, inf. of שָׁבַע 'to return'; נָקַר Jer. 48. 11, Pause, 'he is changed,' st. מָוַר; and יָמַר Ezek. 48. 14, Hiph. from the same stem.

In Syriac all the verbs ע"ע form their forms with prefixes after the analogy of verbs ע"ו. See Nöldeke, Syriac Grammar, §178 C.

This is also the explanation of all those forms with prefixes from verbs ע"ע in Hebrew, in which the first stem-consonant is doubled. They are based on the analogy of verbs ע"ו.

Instances are יָדַם from דָּמַם 'to be silent.'

יָקַד stem קָדַד 'to bow the knee.'

יָתַם stem תָּמַם 'to finish.'

יָדַל stem דָּלַל 'to be slack, feeble.'

יָשַׁח stem שָׁחַח 'to be low.'

יָפַד stem פָּדַד 'to tumble, fall.'

סבב stem סבב 'to turn' and יסבב, Hiphil from the same stem.

The same formation is observed in the case of some forms from ע"ו stems.

ספס stem ספס 'to draw back, depart.'

ספל stem ספל 'to cut off.'

סזל Hiphil stem סזל 'to shake.'

ספית Hiphil stem ספית 'to move.'

ספל Hoph. stem ספל 'to be long.'

סנח stem סנח 'to lay down,' 'to cause to rest' Hiph. stem סנח.

According to Stade, §535b, the form ספס, impft. 3d person fem. plur. stem סבב 'to turn,' with the insertion of the diphthong *ai* (י) between the stem and the ending, rests on the analogy of the same form from stems ס"ה (for ס"י or ס"ו) ספס.

In Mandaean (Nöldeke, Mandaean Grammar, page 83) and in Amharic (Praetorius, Amharische Sprache, p. 141) confusion between stems ע"ע and ל"י and ל"ו is especially frequent. The examples are all given in the places cited, so that it is needless to give them here.

According to Praetorius (loc. cit.), this is also the explanation of the form ספס, i. e. the stem סבב is treated as if it were סבה for סבו (sabawa). On ספס see also Wright, Arab. Gramm. §120 rem. c. and Spitta, Dialect of Cairo, §101, 3.

Sometimes stems ע"פ and פ"פ are confused. As is well known, many of the stems פ"פ in Hebrew are originally ע"פ, the original initial *waw* reappearing in the Niphal, Hiphil, and in verbal derivatives with *ו*-preformative. Not all such formations with *waw* are organic, however. Thus, as is pointed out by Haupt (S. F. G. p. 22, note 1) the verb ידע 'to know' is a verb *cum yódh originario*, as appears from the Assyrian *īdi, tīdi*, and Ethiopic *āydē'a notum fecit*. Hence the Hiphil הודיע, Syriac *'awda'* and *shawda'* are analogical formations.

Some forms from stems ע"ע show the influence of פ"פ analogy to which they bear an external resemblance.

סצר Job 18. 7, impft. stem צר 'to be narrow.'

The verb הלך 'to go' has the impft. Qal. הלך and Hiph. הולך as if the stem were ולך, while the form הילך Mic. 1. 8 points to a form ילך *cum i originario*.

So also the form יטב, impft. from טוב 'to be good,' as if the stem were יטב.

In Assyrian the stems פ"פ and פ"ה (פ"ה) are also confused. Thus *uṣēbila, uṣēšib, uṣēši* from stems ע"פ are formed as if from stems פ"פ.

So also *attašab*, *ittašūni*, *muttabil* are formed after the analogy of *attalak*, etc., and this again shows the influence of stems פ"ן. *izzazū*, present of *nazāzu* 'to stand,' is based in its vocalization on the analogy of *'illakū* from *'alāku* 'to go.' See Haupt, S. F. G., p. 52, note 10.

So also *iddan* stem *nadānu* 'to give,' by the same analogy. *illika* 'he came' is פ"ן analogy. See Haupt, S. F. G., p. 66, also *Hebraica*, Vol. I, p. 255.

So also the stems וק and וק form their preterites as if from וק and וק, *ē-gir*, *li-ri-qu* (Del. Ass. Gram. §112).

Dr. Rosenberg, *Das Aramäische Verbum im Babylonischen Talmud*, gives the following instances of transfer from one weak class to another in that idiom.

P. 40. מיתצר (יצר) 'er ward gebildet' Joma 85a, Sota 45b analogy of ע"ו.

P. 44. Most verbs ע"ו form their Afel after the analogy of פ"ו.

P. 45. Verbs ע"ע with object-suffixes are sometimes treated after the analogy of ל"י.

P. 46. Ethpeel of verbs ע"ע, formed, partially at least, after the analogy of verbs ע"ו. So עלל forms its *Pael* and *Ethpaal* after the analogy of verbs ע"ו.

P. 63. Verbs ל"י form with pronominal suffixes after the analogy of the strong verb (cf. Nöld. Mand. Gram. §204).

In modern Syriac פִּיחָא, fem. פִּחְתָא 'lukewarm,' whose stem is really פוּח, is based on the analogy of קירא 'cold,' חימא 'warm' (Nöld. Neusyrische Sprache, §43).

Further, שמעא 'heard' and מרעא 'sick' are formed after the analogy of other ל"י forms, such as רכיא 'pure,' חוּיָא 'seen,' etc. (Nöld. Neus. S. §44, p. 91).

Cases of analogical formation in the confusion of different classes of weak verbs are specially frequent in modern Syriac. See Nöld. *Modern Syriac Grammar*, p. 188, §95.

Verbs פ"י and ע"ו are confused. See Nöld. op. cit., p. 228, §108, p. 230.

Verbs פ"א, such as אסק 'to ascend,' אכר 'to catch, to be cold,' are treated after the analogy of verbs פ"י.

Many verbs originally ע"ע are treated after the analogy of verbs ע"ו, e. g. כיפא, כפף 'to bend, stoop' from תאם, כפף, etc. 'to finish' from תמם (Nöld. Neusyr. Sprache, p. 231, §109).

ל"י טבא 'to be worth' has some forms from טבא (ל"י).

רָאָק 'to spit' has in the inf. בִּרְאָק after the analogy of נ"פ (Nöld. §110, p. 233).

ל"י and ל"י are confused (p. 239, §111). See also p. 248, §114.

The verb יִהְיֶה (p. 254, §117) forms its conjugation from several different though correlated stems.

There are many instances of such confusion of the different classes of weak verbs in Mandaean. The instances are too numerous to be mentioned here in detail. See Nöld. Mandaean Grammar, p. 24, §22.

Verbs *tertia* ו after the analogy of verbs *tertia* י.

P. 82, §74. Verbs ו"ו after the analogy of ו"ו and conversely ו"ו after the analogy of ו"ו.

Verbs *mediae* נ and ו after the analogy of ו.

Verbs ו"י after the analogy of ו"ו, and so conversely verbs ו"ו after the analogy of verbs ו"י.

Nominal formations from different stems showing the influence of ו"י stems are given on p. 104, §90.

P. 111, §94. (Mand.) forms from ו"י, ו"י treated after the analogy of forms from stems ו"ו.

P. 236, §177a. Verbs *tertia* gutturalis after the analogy of stems ו"י.

P. 243, §180. Verbs נ"פ are treated after the analogy of verbs ו"ו, ו"ו.

Verbs ו"ו and ו"ו are habitually confounded (Mand. Gram. p. 247, §183).

So p. 255, §189. Verbs *mediae* ו or נ are treated after the analogy of verbs ו"ו.

Cases of the influence of one class of weak stems upon another in Amharic are given in Praetorius, Amharische Sprache (Halle, 1879), p. 141, §103. As they are all fully cited there and discussed at some length, it is needless to mention them here in detail.

Other cases of the confusion of different weak stems in Arabic are given by Barth, Nominalbildung, p. 45, §30b.

The adjective-form *qätıl* from stems ו"ו, preserves the *w* in a few cases such as *ṭawıl* 'long,' *ḥawıd* 'zealous.' But in most cases they follow the analogy of stems ו"ו, with the usual change of *äjē* to *äjī* (*aijī*). Examples are *majjī* 'dead,' '*aijjīd*, *jajjīd* 'good,' *haijīn* 'light, easy.'

Other instances are given p. 188, §127c, *qaijīm*, *ḥaijīl*, *saijjīd*.

CLASS I.

Division B.

Stems with weak stem-consonants after the analogy of stems with strong stem-consonants. Also original bi-consonantal stems after the analogy of tri-consonantal stems.

As was pointed out in the first part of this article, many stems in the Semitic languages which seem to have three stem-consonants were probably bi-consonantal in their original condition, and assumed an additional stem-consonant in order to make them tri-consonantal by the force of the prevailing analogy. Other stems, instead of becoming completely tri-consonantal remained more or less imperfect and preserved some traces of the original bi-consonantal condition. In different languages also they attained to different stages of completeness. Thus, from the original bi-consonantal stem קם we have in Hebrew קום and קם (with a long vowel), and in Arabic *qâma*. The Hebrew intensive is קומם , and the Arabic *qauyama*, and Aramaic קומם (קומם Dan. 6. 8). Here it will be seen that the original bi-consonantal stem is more conspicuous in Hebrew, and the form of the tri-consonantal stem is more completely attained in Arabic and in Aramaic, *qauyama* standing on exactly the same plane as *qattala*.

Finally, taking the inflection as it now stands, where the peculiarity or feebleness of one or more of the stem-consonants, or the originally bi-consonantal nature of the stem gives rise to different classes of verbs, each with its own special paradigm (according to the current denomination ש"ע , ש"ע , ש"ע , ש"ע , etc.), we find many individual cases which, disregarding these peculiarities, leave the paradigm to which they ought normally to conform and follow the analogy of the strong or perfect verb throughout.

We find, then, that we can distinguish three closely related cases:

(1). Stems in which all traces of the original bi-consonantal nature have disappeared, and which have three stem-consonants in all of their forms.

(2). Stems in which the analogy of the tri-consonantal stems is established as part of the regular paradigm in some of the forms.

Here we find such cases as the Arabic *qauyama* from *qâma*, Aramaic קומם from קם .

Compare also Nöldeke, Modern Syriac Gramm. §42, where it

is observed that those nouns which in the earlier language were bi-consonantal, such as *dim* 'blood' and *shim* 'name,' have become tri-consonantal in modern Syriac, *dimma* and *shimma*.

Under this head may also be placed the forms treated by Barth, *Vergleichende Studien*, Z. D. M. G., Vol. 41, p. 603 fg.

Because of the reluctance of the Semitic languages to have nouns with only two stem-consonants, masculine nouns of this class of forms of which he is treating (viz. shortened derivatives of stems ל"ו and ל"י) are but seldom found in the northern Semitic languages, and in Arabic hardly ever. In consequence of the prevalence of the law requiring *three* stem-consonants, the greater number of such shortened nouns assumed the feminine ending, not to denote sex, but simply to compensate the loss sustained by the disappearance of the third stem-consonant. Cf. Hebrew שָׁקַת 'drink' from the stem שָׁקַה, גִּוָּה 'body.' In Arabic *hize* from the stem *haziya* 'to obtain' and many others.

So also the "feminine ending" is added in those cases where the *first* stem-consonant has disappeared. לָרַת and Arabic *lidatu* from the stem וָלַד (*walada*), יָלַד 'to bear.' This "feminine ending" has become so entirely a part of the stem as to remain in the plural. Compare דְּלָתוֹת 'doors,' קִשְׁתוֹת 'bows,' שְׁקָתוֹת 'watering-troughs,' בָּרָסְתוֹת Ez. 13. 18 'bands, pillows.'

(3). Individual cases of single forms where the normal paradigm or type of the class to which the stem belongs is disregarded and the form is based directly on the analogy of the strong or regular verb.

In אֶיְבֹתִי Ex. 23. 22 'I was an enemy' and in אֶיָּף 'weary,' we evidently have a later development of a consonantal *yodh* between the two original consonants of the stem.¹

With regard to אֶיָּף, however, we must note that Barth, *Nominalbildung*, § 106, regards it as transposed for אֶיָּף.

The assimilation of a vowelless *y* is a familiar fact in Hebrew morphology. In cases where it is retained, the analogy of other consonants not subject to such assimilation doubtless has its influence. So תִּנְיָשׁ Is. 58. 3 'ye exact,' יִנְטֹר Jer. 3. 5 'He will keep,' יִנְצֹר Deut. 33. 9 'They will guard,' יִנְקֹב Job 40. 24 from נָקַב 'to bore through,' יִנְקֹפִי Is. 29. 1 from נָקַף 'to come round,' said of feasts.

¹ Cf. Haupt, *Zeitschrift für Assyriologie* II 276, and *Beiträge zur Assyriologie* I 296 below.

לְהִתָּךְ Ezek. 22. 20 'to melt,' Hiph. inf. of נָתַךְ.

הִתָּקָּ Jud. 20. 31 Hophal from נָתַק 'to cut off.'

In Assyrian *n* is not assimilated to the following dentals: *enzu* 'goat,' *bintu* 'daughter,' *ensu* 'weak.' See Haupt in *Hebraica* I 227.

In עָוֵר Ps. 119. 61 'to surround' Piel of עָוַר; עָוֵר 'to make blind,' קִימֵנִי Ps. 119. 28 'preserve me alive!' Piel of קָיָם; וְחַיְבָתָם Dan. 1. 10 'so ye should endanger,' Piel of the stem חָיַב; הִצֵּטִידְנוּ Josh. 9. 12 'we provided ourselves with food,' Hithpael denominative from צִיד 'food,' from the stem צָוַד 'to hunt,' we have instances of forms of stems with weak stem-consonants treated after the analogy of stems with strong consonants.

In a few cases we find, instead of the usual form of the construct infinitive from ל"ה stems (לָלֶזֶת), a form which is based on the analogy of the same form from the strong stem קָטַל; such forms are עָשָׂה 'to do,' רָאָה 'to see,' קָנָה 'to get,' שָׁתָו 'to drink.'

Such forms as שְׁוֹרִים 'boves,' הֲוֹתִים 'thickets,' הִילִים 'forces,' עִירִים 'cities,' הִישִׁים 'bucks,' שֹׁטִים 'whips,' קֹצִים 'thorns,' אֵילִים 'terebinth-trees,' show the influence of the analogy of the form דְּבָרִים.

In the different forms of the *verba mediae geminatae* (or ע"ע verbs) there are many forms which seem to point to an original bi-consonantal stem, e. g. סָב, while others are formed as if there were three original firm and equally legitimate stem-consonants, סָבֵב. The former are the more organic, more in accordance with Hebrew phonetic law; the latter are analogical.

Thus by the side of such forms as דָּק 'he has beaten small,' חָם 'he is warm,' and מָר 'it is bitter,' we have other forms with the second stem-consonant repeated. גָּזַז 'he has plundered,' חָמַם 'he is warm,' מָדַד 'he has measured,' סָבֵב 'he has surrounded.'

After the same analogy we have substantives such as רֶקֶס 'terror,' the plural עַמְמִים 'nations' by the side of the more organic form עַמִּים.

So also in the construct infinitive we have such forms as נָזַז 'to cut,' לָסָבֵב Numb. 21. 4 'to compass,' עָוֹז 'to make strong,' צָרַז 'to bind up,' מָסַס Is. 10. 18 'to melt away,' שָׁדַד 'to spoil' Jer. 47. 4, שָׁלַל 'to spoil,' by the side of the more organic forms סָב, עָוַז.

So also the imperfect יָדַד (stem נָדַד) 'to flee from' and יָחַן from the stem הָנָן 'to be gracious,' by the side of the more organic יָחַן.

¹ Cf. Nöldeke, *Mand. Gramm.* §132; *Syr. Gramm.* §§21D and 93.

In Hebrew all forms with the (so-called) *Dagesh forte implicitum*, especially in the Piel, Pual, and Hithpaël of verbs whose second stem-consonant is a guttural are analogical. The phonetic law is that the guttural cannot be doubled. Then the short vowel preceding the guttural must be lengthened because it stands in an open unaccented syllable. Cases where this is not done, e. g. כָּשַׁר 'he has consumed,' נָאֵץ 'he has despised,' נָאָר 'he has rejected' are based on the analogy of קָטַל.

The "virtual doubling" of the gutturals is a fiction of the grammarians.

CLASS I.

Division C.

Forms of the strong stem after the analogy of forms from weak stems.

One of the most remarkable cases where the form of the strong verb has been influenced by the weak verb in Hebrew is the long accented *i*-vowel in the final syllable of the Hiphil or causative. So Bickell, §47: "The remarkable transition of *i*, which has arisen from *a* to *i* in the *Hiphil*, has perhaps originated according to an erroneous analogy from the conjugation of the verbs mediae *v. y.*, where this *i* is phonetically legitimate." Compare also Stade, Hebrew Grammar, §91. König's criticism (*Lehrgebäude*, §27. 4), that the basis is too narrow, and that it is too bold to explain a form of the regular verb by a single form of the irregular verb, is hardly borne out when we consider the prevalence and power of analogy. See Delbrück, *Einleitung in das Sprachstudium*, p. 108, where the case is cited that four Old Slavonic verbs, *jesmī*, *věmī*, *damī*, *jāmī*, have effected that in New Slovenian and New Servian all the verbs of all classes of conjugation end in *m* in the first person singular number.

In some forms of the intensive from tri-consonantal stems, where it is formed by the repetition of the third stem-consonant, we may have the influence of the analogy of originally bi-consonantal stems where such forms are organic. Such are אָנְנָה Job 3. 18 'they are at ease,' אָנְנָה 'they languish.'

Under this head may be placed also those plural forms of modern Syriac in which the stem of the singular is enlarged by the repetition of the final stem-consonant (Nöld. *Neus. Sprache*, p. 143, §72). These are probably, as Nöldeke remarks, based on

such plural forms as 'amamin, Hebrew עַמָּיִם. The instances of this kind are given by Nöldeke loc. cit. Among them are מִלְלָה (milâlê) 'words,' בִּרְכָּה (birkâkê) 'knees,' טִלְפָּפֶה (tilpâpê) 'eyelashes.'

Under this head may also be placed those cases where a phonetic process, starting under certain fixed conditions, was afterwards applied to stems where these conditions did not exist. In such cases the strong or regular verb leaves its normal paradigm or type and follows the analogy, not exactly of a weak stem, but of a stem whose stem-consonants, although strong and firm, still have some peculiarity which causes a change in the inflection.

The Semitic verb forms its reflexive by a prefixed *it* or *ta*. In Ethiopic it is *ta*. In Hebrew the form of the reflexive prefix is הִתְ. In stems beginning with a sibilant the ה of this reflexive prefix is transposed so as to come after the sibilant instead of before it. Thus, from שָׁמַר 'to keep,' 'to watch,' the imperfect reflexive is יִשְׁמָר 'he will observe (for himself).' This mode of forming the reflexive from stems beginning with a sibilant by means of an infixed instead of prefixed *t* is found in nearly all the Semitic languages. In Arabic and Assyrian, however, this mode of forming the reflexive by means of infixed *t* (*ta* or *tau*) is not confined to stems beginning with a sibilant, but the reflexive particle is universally infixed.¹ In this case the strong probability is that it was not so in the primitive form of the language, but that it started, as in Hebrew, with the stems beginning with a sibilant, and then the influence of these formations gradually spread until it included all stems.

Only two other explanations are possible; either the primitive Semitic form was indifferently prefixed or infixed *t*, or else it was universally infixed, and became prefixed in Hebrew, Aramaic, etc., except in the case of stems beginning with a sibilant. Praetorius, in his article "Äthiopische Grammatik und Etymologie," in the first number of the Beiträge zur Assyriologie, edited by Delitzsch and Haupt (p. 25 and note), says that it is not unlikely that the reflexive *t* was originally infixed in Ethiopic. The proof of this which he cites, however, in the case of *kadāna* 'text' seems very weak.

¹ In Assyrian the *t* is infixed not only in the reflexive derived from the Pal (*iptdlix*), but also in the reflexive derived from the intensive stem (*uptallix*). In the latter formation the *t* is prefixed in Arabic (V and VI), not infixed as in the eighth form.

Delitzsch, on the other hand (Assyrian Grammar, §83), remarks that the reflexive prefix was originally prefixed and not infix, and that traces of this prefixing are still found in Assyrian. This, too, favors the position that the change from prefix to infix first took place in the case of stems beginning with a sibilant, to avoid cacophony, and was then, by the force of analogy, extended to all stems.

A similar case of the extension of a phonetic change beyond its organic limits by the process of analogy is found in Amharic, in the linguistic phenomenon known as 'palatalization'¹ (German, *Mouillirung*), in which the pronunciation of a consonant is affected by a certain liquid modification occasioned sometimes by a following *i*, *j*, or *ē*, and sometimes also taking place without the influence of these sounds. In the cases where the palatalization is occasioned by the sounds mentioned, certain modifications in vocalization are phonetically legitimate. In some cases, however, these changes in vocalization take place where they are not organic, but analogical. There is no *i*, *j*, or *ē*-sound to occasion them, yet the language acts as though there were, simply because the phenomenon of palatalization is usually accompanied by these sounds.

In the pronominal suffix of the 3d person plural, masculine or feminine, *ātjāw*, for instance, the liquid modification of the *t* is not occasioned by a following *i*, *j*, or *ē* sound. Yet the language acts as though there must be a latent *ē*-sound, and in some cases places it there; so in the form *bilātjēw* 'when he told them.'

So also it often happens that a stem which originally ended in *w* or *j* lost its final stem-consonant in the modern Amharic by a process of phonetic decay. The theme thus shortened is simply inflected as though it never had another stem-consonant, or else a trace of the vanished final *j* is left in the palatalization of the preceding stem-consonant. In some cases, however, where this palatalization has taken place without the influence of a final *j* the language proceeds on the presumption that there must have existed such a final stem-consonant. Thus the verb *mānātjā* never existed in the form *manataja*, yet it forms its imperfect, not *imantj*, as it should do, but *īmanatj*, as though there were a final stem-consonant *j*. See this whole matter fully treated and illustrated in Praetorius, *Amharische Sprache*, p. 45, §23b, and pp. 237-240, §200.

¹ Cf. *Beitr. z. Assyr.* I 257, n. 9.

CLASS II.

Analogical formations involving changes and confusion in vocalization.

In Semitic we distinguish in the nominal formations between substantives of *internal formation* (Stade: Nomina innerer Bildung; Barth: Schlichte Nomina) and substantives of external formation (N. äusserer Bildung). Substantives of external formation are formed either by *prefixes* or by *suffixes*.

Substantives formed directly from the stem without consonantal additions are divided into different classes according to differences in their vocalization.

According to Barth, Nominalbildung, these different nominal formations in Semitic exhibit many instances of the analogical influence of one form or class of forms upon another in the matter of vocalization.

The following is a brief and summary statement of the fundamental positions of his book:

The nominal formations of Semitic are formed either from the perfect or from the imperfect verb-stems.

There are three classes of perfect verb-stems, distinguished by three characteristic vowels, *a*, *i*, *u*. Forms with *a* are transitive. Forms with *i* and *u* are intransitive. Each of these classes of perfect-stems gives rise to a corresponding class of nominal formations likewise distinguished by the three characteristic vowels, *a* for the transitive, and *i* and *u* for the intransitive.

There are also three classes of imperfect stems, distinguished likewise by the three characteristic vowels *u* and *i* for the transitive, *a* for the intransitive. Each of these three classes, again, gives rise to a corresponding class of nominal formations.

In many of these nominal formations we observe that the characteristic vowel of the class to which it belongs has been correctly maintained. These call for no further attention. In other cases, however, we find that a change has taken place. That is to say, the verbal stem, either perfect or imperfect, as it now exists, has a different vowel from that of the corresponding nominal formation. In cases such as these there are two possible explanations. Either, in the original form of the language the verbal stem existed in two forms with two different characteristic vowels, one of which subsequently ceased to be used, surviving, however, in the corresponding nominal formation; or else the anomalous characteristic vowel of nominal formation is the result of analogy.

I have noted the following cases as cited by Barth :

§17β. Intransitive nominal forms of the form *qūtūll*, legitimate when formed from *u*-perfects, but sometimes also found derived from *i*-perfect stems. Thus '*umudd* (perf. *i*) 'full of youthful strength.'

Sometimes intransitive adjectives of this form are formed from transitive stems. Thus *šumull* 'hard, firm,' *kubunn* 'avaricious.'

P. 36, §24. Intransitive nominal forms of the form *qūtl* derived from *i*-perfects.

In Arabic :

zuhd from *zahida* 'to be white, glossy.'

husr 'loss' from *hasira* 'to lose.'

ujb from *ajiba* 'to be astonished.'

ruhb from *rahiba* 'to fear.'

ruḡb 'avidity, voracity' from *raḡiba* 'to wish, desire.'

In Hebrew :

אֱמֻנָה 'faithfulness,' from אָמַן (?) 'to be faithful.'

חָסַר 'want' from חָסַר 'to want.'

In Syriac :

ܪܢܐ 'anger' from ܪܢ 'to be angry.'

ܥܫܢܐ from ܥܫܢ 'to be strong, heavy.'

ܫܡܢܐ from ܫܡܢ.

ܢܚܝܬܐ 'laughter' from ܢܚܚ 'to laugh.'

ܫܠܡܐ from ܫܠܡ 'to be whole.'

ܪܚܝܬܐ 'length' from ܪܚܝܬ.

Barth, p. 43, §28c. Instances of the form *qātīl* intransitive from *u*-perfect stems.

sarī 'rapid' from *sarū'a* 'to hasten.'

jalid 'hard' from *jaluda* 'to be hard, firm.'

karīm 'noble' from *karuma*.

kabīr 'old' from *kabura*.

kabira, fut. *a*, 'to be advanced in age,' is, however, also given in the dictionaries.

kaṭīr 'many' from *kaṭura*.

aṣīm 'great, large, immense, huge' from *aṣuma*.

In the Targums :

ניב 'dry,' שריוך 'quiet,' רמיוך 'sleeping,' חשיוך 'dark,' from stems having *u* in the perfect.

The same phenomenon is observed in nominal derivatives from imperfect stems (see page 96, §64d,e). Thus the Hebrew infinitive קָטַל is formed not only from *u*-imperfect stems, where it is

organic, but also from intransitive verbs with *a*-imperfect, e. g. יָשָׁן 'to sleep,' אָהַב 'to love,' חָלַל 'to cease,' שָׂנֵא 'to hate,' יָרָא 'to fear.' These are clearly the result of analogy. In other cases, however, we must consider the possibility that in a previous period of the language the two forms with two different characteristic vowels existed side by side, the one having survived in the present form of the verb-stem, the other in the corresponding nominal formation.

Thus in Hebrew imperfect *a* is the regular imperfect of stems having a guttural as second or third stem-consonant, while the corresponding nominal forms often point to an original *u* or *i* form. Such are פָּנַע 'to strike,' זָעַף 'to be angry,' שָׁלַח 'to send.' So also transitive *qill* forms in Arabic from verbs *mediae gutturalis* which now have only imperfect *a*, *fīl* 'act,' *sihn* 'charm,' *rihle* 'passage, journey.' Here it is more probable that the uniform *a*-imperfects are themselves the result of a later modification under the influence of analogy.

So also in the case of transitive nominal forms of the form *qātl* or *qitl* derived from the imperfect stems.

The imperfect *i* itself has been mostly crowded out by the prevailing analogy of the *u*-imperfects, while the original vowel has often been preserved in the corresponding nominal formation, especially the infinitive. (See Barth in ZDMG 43, 177-91.)

The following instances are given. Infinitives with suffixes: שָׁכַר, נָפַלָם, מָכַר (מָכַר 'to sell').

Infinitives without suffixes: לָעֵשֶׂר Deut. 26. 12 'to tithe'; also the noun מֵעֵשֶׂר 'tenth'; לָעוֹר 'to help' 2 Sam. 18. 3 (Kēthībh), לָחָלַק 'to receive a portion.'

Sometimes even when the *i*-imperfect was preserved, and not crowded out by the prevailing analogy of the *u*-imperfect, its nature was misunderstood and this misunderstanding led to further analogical formations.

In many cases the language mistakenly assumed them to be Hiphil-imperfects, with which they completely coincided in form, and then by analogy produced other Hiphil forms to correspond with them.

So especially in the case of stems ע"ו.

From יָשָׁם, יָבִין, יָרִיב, etc., were formed the Hiphil-forms הָבִין, הָעוֹר, etc.

The same thing took place in case of the other stems. According to Barth (op. cit. p. 119, §78a): Whenever a transi-

tive form *qill* of any stem points to an original *i*-imperfect, and when this stem occurs in some languages in the *Qal*-form, but in others only in the *Hiphil*, the presumption is that this *Hiphil* is of secondary formation, based on a misconception of the original *i*-imperfect. Thus the common Semitic form זָכַר, Arabic *zakar*, Ass. *zikru* points to an original *i*-imperfect stem *jazkir*; compare Aramaic זָכַר with *ā* on account of ר.

As, however, this *i*-imperfect has disappeared from the *Qal* in Hebrew, it is probable that it was retained as a *Hiphil*, and then the other *Hiphil* forms were formed as a later analogical development.

Arab. *ḥaḍana* 'to take in the arms' has at present only the *u*-imperfect. From this we have Hebrew חָצַן 'arm, bosom,' and Arab. *ḥuḍne* 'embrace.' But the Hebrew חָצַן and Arab. *ḥiḍn* point to an original *i*-imperfect.

From הָפַך 'reverse, contrary,' and הִפְתִּיךָ 'overthrow,' we infer the former existence of a form הִפְכָּךְ as *Qal*-imperfect. This is not found now in north-Semitic. But Syriac has *Aphēl* in the same sense as Hebrew and Syriac *Qal*. Compare also Hebrew הִתְפַּךְ Job 30. 15, which presupposes the *Hiphil*. In the same manner the noun *siqi* (watering) and the imperfect *iasqi* explain the formation of the later *Hiphil*, הִשְׁקָה and Aram. אִשְׁקִי, resulting in crowding out the *Qal* which must have existed at a former period; cf. שָׁקַת, Syriac אִשְׁקִיתָ etc.

So also the Hebrew נָסִיךְ 'libation,' form *qatil*, Deut. 32. 28, points to an original *i*-imperfect. Hence נָסִיךְ Ps. 16. 4, וְנִסַּךְ Gen. 35. 14 are regarded by Barth as originally *i*-imperfects *Qal*. Being erroneously regarded as *Hiphil*-imperfects they furnished the basis for further analogical *Hiphil*-formations. Another case is וִיקָהֵל. Being regarded as a *Hiphil*-imperfect it furnished the basis for further analogical *Hiphil*-formations, but וִיקָהֵל, וִיקָהֵלִים, and וִיקָהֵלוּ point to an original *i*-imperfect of the *Qal*.

P. 116, §77a, 3. In Arabic the transitive form *qille* is formed organically from *i*-imperfect verb-stems to express the mode or manner of the action expressed by the verb. After this meaning had become established for this form it was extended by the force of analogy to verbs of every class.

P. 126, §82. Transitive nominal formations *qātūl*, *qātūl* formed from the imperfect.

Where such formations exist from stems which at present do not have *u* as the characteristic vowel of the imperfect we must

again, as elsewhere, distinguish two cases; either at an earlier period the *u*-imperfect existed side by side with an *i*- or *a*-imperfect, and was gradually displaced, or else the *u*-nominal formations are the result of analogy. Instances of the former case are seen where the Arabic has only *i*-imperfect while Hebrew and Syriac have *u*-imperfect; so Arabic *hulūk*; יָהָלַךְ and *ḡufār*. But many such cases are probably the effect of analogy.

The following are instances of infinitives of this class where there existed no corresponding *u*-imperfect:

uutūb from *uataba* 'to leap.'

urūd from *urada* 'to arrive.'

ujūd from *ujada* 'to find.'

ujūb from *ujaba* 'to be necessary.'

u'ūl from *u'ala* 'to seek refuge in.'

ujūz from *ujaza* 'to be brief.'

P. 135, §85d. The infinitive *qatīl* is used to form collectives. Organically it belongs, of course, to *i*-imperfects, but it is often found where there is no corresponding *i*-imperfect, especially to denote collectives of the names of animals. So *kalib* 'dogs,' *qā'in* 'sheep,' *ma'iz* 'goats,' *naqid* 'cattle.'

e. In Ethiopic the infinitive *qätīl* has become the regular verbal infinitive for every class of verbs, and as such is formed from all the different conjugations. This analogical extension of the infinitive form *qätīl* has completely crowded out the old parallel form *qätīl*.

f. So also in later Hebrew (Mishna) the feminine קטילה, used to denote abstract notions is formed without regard to the character of the stem. The instances given are, פריקה, חסימה, ביאה, הליכה, שביתה, אמירה, יציאה.

P. 144, §92. Transitive *qatīlat*. In the case of the words נקבה and טרפה we are unable to determine whether we have the evidence of a former *i*-imperfect of these stems, or analogical formations induced by the signification of the same form from other stems.

P. 174, §122c. Speaking of the active participial form *qātāl* (or *qātāl*) he says that a genetical connection with the infinitive *qūtāl* is beyond question, and both go back in their origin to the *u*-imperfect. But just as it was shown (in paragraph 82B of this same work) that the infinitive *qūtāl* was often formed analogically when there appears no *u*-imperfect, so also the participial form *qātāl* is used to form an active participle from a number of stems which show only the *i*-imperfect; so *qarūb* (by the side of *qarīb*)

'striking,' *ḥatūf* 'buzzing, sounding, clanging,' *ḡašām* 'violent' (but *ḡašama* is given with *u*-imperfect), *kašūb* 'gaining, acquiring.'

P. 175, §122a, note 1. Instances of active participles of the form *qātūl* formed from stems having *i*-perfects, through the influence of analogy.

In Arabic: *ḡaḥāk* 'laughing,' *amāl* 'doing,' *ia'ūs* 'despairing.'

In Hebrew: שָׂנֵא *šānē* 2 Sam. 5. 8 and אֲהַיִבָּתָה *ahayibāṭā* Hosea 3. 1, are cited as instances of this form.

From the Mishna, הַעֲסֻקִין *ha'asūqīn* 'busy'ing themselves,' Para 4. 4, דֹּוֹפֵן *dōfēn* 'dripping olive,' Pēā 7. 1 וְהִשְׁמַרְתָּ *wehishmartā* 'be watchful,' Ab. 2. 14 שְׂרֵי *šerē* 'dwelling,' etc.

P. 178, §123a. The form *qātūl* as passive participle is formed in Hebrew from all stems indiscriminately.

P. 186, §126a. The participial form *qātīl* organically connected with *i*-imperfects is formed in Arabic from verbal stems of every kind.

d. In Aramaic this form has become the regular passive participle, and as such is formed from every transitive verb.

P. 201, §136b. Participle *qātīl*. This form arises from the transitive *i*-imperfect. The form from the *i*-imperfect, rather than that formed from the *u*-imperfect, became the prevailing one through the influence of the forms of the participle in the derived conjugations, which show an *i*-vowel after the second stem-consonant.

The only difference between the participle of the Qal and that of the derived conjugations lies in the fact that the latter prefix an *m*, while the former, not taking the prefix, lengthen the vowel of the first syllable.

After this form was established as the participle of the transitive *i*-imperfect, it was extended to all transitive imperfect stems, and also to those stems which are intransitive in structure, but transitive in meaning. In a few cases it is extended to verb-stems intransitive in meaning.

Arabic, *āmin* 'sure,' *sālim* 'safe,' *bā'id* 'far.'

Eth. *rātē* 'true.'

Aram. דִּחַל *diḥal* 'fearing,' קִרַּח *qirāḥ* 'rejoicing.'

Heb. חִלָּה *ḥillā* 'base, abject.'

I have stated these principles and given these illustrations just as they are given by Barth. I must say, however, that to my mind his whole position and the value of all his discussions are

extremely doubtful. For, first, as he himself admits in many places, we do not know how far these forms, which apparently show a different vowel from that of the form from which he derives them under the influence of analogy, may go back to other forms which no longer exist, but which, when existing, had the same vowel as the nominal formation derived from them.

The whole of §100, for instance, on the imperfect infinitives of the derived conjugation is made extremely uncertain by the admission which he rightly makes, that formerly these imperfects may have shown an *u* as well as an *i*-vowel. This but shows how uncertain the whole matter is, far too uncertain, in fact, to form the basis of scientific investigations and conclusions.

But again, I do not see that he establishes with any degree of certainty the fundamental position of his whole book, viz. that all the nominal formations must be referred either to the perfect or imperfect verb-stems, whose characteristic vowel will normally be the characteristic vowel of the corresponding nominal formation, and that all deviations therefrom are the result of analogy. Why should all nominal formations necessarily come through the channels of the perfect and imperfect verb-stems? Why can they not be referred directly to the simple ground-stem, without the intervention of the perfect or imperfect verb-stems? These are questions not satisfactorily answered by Barth, while they are suggested by the many deviations from the principle which he seeks to establish.

ABEL H. HUIZINGA.

III.—ON PAROXYTONE ACCENT IN TRIBRACH AND DACTYLIC ENDINGS.

Dr. B. I. Wheeler's most suggestive dissertation, 'Der Nominal-accent' (Strassburg, 1885), has been already discussed in part in this Journal.

Only casual mention, however, has thus far been made of some forty pages, covering about one-third of the whole dissertation.

As "Rule IV"¹ Wheeler maintains that words with dactylic ending, which were originally oxytone, change into paroxytones as a compromise between the original (I. E.) oxytonesis and the special Greek accent. The proof adduced in support of this law offers an explanation for much hitherto unexplained, and demands a respectful investigation on account of the approval with which it has been received. Brugmann, for example, in his *Vergl. Gram.* (I, pp. 545, 546) uses this 'dactylic law' as a well established principle.

A critical examination, however, of all the material for the compounds affected, and of words in *κός, λός, μός, νός, ρός, τός*, throws a strong burden of proof upon the rest of the material, already doubtful, which has been brought forward to prove this 'law.'

The objections to the explanation of paroxytonesis as given by Wheeler, may be summarized briefly in advance:

I. The categories of words where the supposed law would be free to act (that is, free from considerations such as may have affected compounds) are few in number (as *κός, λός, μός, νός, ρός, τός* and the ordinals), and some of the examples claimed as 'simplicia' are really compounds. In examining this body of material we find that so far from oxytones becoming paroxytones with any regularity, in reality but few do so.

II. Some examples claimed in proof of the dactylic rule may be explained as diminutives. Of words in *-ιος*, some are of oxytone pedigree and some are not, and in general diminutives have so great an affinity for paroxytonesis, or for accenting the

¹ Regel IV, Dactylisch ausgehende Oxytona werden zu Paroxytona.

first syllable of the suffix, that even the *trochaic* ending *-ισκος* is regularly paroxytone.

III. The tribrach oxytones behave, under the same circumstances, precisely like the dactylic oxytones.

IV. In compounds, where the phenomenon in question chiefly occurs, the accent is regularly oxytone if the word is trochaic and active; paroxytone if pyrrhic (*whether tribrach or dactylic*) and active; if the word is passive (*whether dactylic, tribrach or trochaic*) the accent is regularly recessive.

V. In anastrophe, tribrach combinations, as intimated above, are treated just as are dactylic combinations.

VI. The argument from the relative antiquity of words is difficult in application. Dr. Wheeler is not rigid in his differentiation, using words from Homer and Euripides, or even much later, without distinction. That the earlier language was 'bekanntlich' fuller of dactylic than of tribrach endings may be questioned. Certainly a superficial verdict would be against it, e. g. forms like *λαο-φόρος*, *λαο-δόκος*, would be as easily managed in the gen. and dat., etc. (*λαοφόρου*) as *λεωφόρος* (*λεωφόρου*, i. e. -υ-), to say nothing of the fact that *λαο* + etc. is the Ionic form.

VII. If the above objections be established the whole burden will be thrown upon certain miscellaneous words, some like *παρθένος* of obscure derivation, upon certain adverbs, and upon the partic. in *-μένος*.

From all this it would appear that the Greeks modified the "recessive" accent in the following way: The accent in compounds was drawn back provided that it still remained on the last member in *active* compounds, and provided that the accent did not fall on a long syllable immediately before a short one,¹ e. g. as in trochaic endings or in words like *δημηγόρος*. Dr. Wheeler himself, in concluding his remarks on this part of his subject, seems to feel this succession of long and short as the most clearly pertinent; he says (p. 104) that the only phonetic explanation which he can give of his law is "die Neigung der Sprache, dem Hochtone eine lange Silbe immer vorzuschicken," and he alludes (p. 61) to Prof. Brugmann's explanation of paroxytonesis

¹ In connection with this, it would seem, is to be explained the chief exception to the "Three Morae Law," i. e. the ignoring of the long penult in words like *άνθρωπος*. An evident disinclination to paroxytonesis of trochaic endings is also clear in *έγωγε* (*έγώ*) (cf. *έμοιγε* from *έμοί*, but *έμοϋγε* and *έμέγε*—only "*neuerer* Grammatiker . . . schreiben *έμεγε*," Kühner, Gr. I, §180).

"als bloss an die Kürze der vorletzten Silbe sich anknüpfend." It is worth while, in this connection, to note that Bopp does not say (see Wheeler, p. 60) 'dass das Griechische eine besondere Neigung zeigt, Wörter von *pyrrhischen* Ausgang zu paroxytonieren," but (see Vergl. Acc. p. 280) "Man vergleiche den Einfluss den eine lange Penultima auf Herabdrückung des Accents hat in Compositen wie *κυνηγός*, *μελοποιός*, im Gegensatz zu solchen wie *πολυφάγος*, *δικογράφος*."

Precisely here it would seem that the question is obscured, and the following investigation was undertaken to establish by reasonably exact statistics the actual facts. From them it appears, as above implied:

1. That trochaic oxytones either remain oxytone or become proparoxytone.
2. That in general, tribrachs and dactyls fare alike even in anastrophe.
3. That in *active* compounds, pyrrhics (whether dactylic or tribrach) are paroxytone because the tendency to 'recession' was arrested midway by the desire to accent the last member.

Dactylic oxytones do not become paroxytone.

The most prominent categories of uncompounded words which were originally oxytone, are those in *κός*, *λός*, *μός*, *νός*, *ρός*, *τός* and the ordinals.

Those in *λος* and *ρος* will be first considered, as Wheeler lays great stress upon some paroxytones ending with this suffix.

Substantives in λος.

<i>ἀρκύλος.</i>	<i>κορθύλος.</i>
<i>κρωβύλος</i> (often <i>κρώβυλος</i>).	<i>φρύγίλος</i> (N. B. ∪ ∪ ∪).
<i>ναυτίλος.</i>	<i>πομπίλος.</i>
<i>ὀππίλος.</i>	<i>ὀρχίλος</i> (also <i>ὄρχιλος</i>).
<i>τροχίλος</i> (N. B. ∪ ∪ ∪).	(<i>σφονδύλος</i>) usually <i>σφόνδυλος</i> .
<i>ἐρωτύλος.</i>	<i>κηρύλος</i> (not cited by Wheeler).

These words are probably all diminutive in character. There is one other word strangely enough cited here, i. e. *αἰ-πόλος*; this is to be classed among the regular active compounds.

This, then, is the paroxytone material for substantives in *-λος*. But, on the other hand, there are two dactyls which remain oxytone, i. e. *μῦελός* and *ὀμφαλός* (also the adj. substantive *θεσσαλός*), and a number of dactyls which are proparoxytone, i. e. *δάκτυλος*,

πύελος, ἄγκαλος, αἶθαλος, κόνδυλος (probably σφόνδυλος), κοτίσαλος, πασσαλος, σάνδαλον, βάκχυλος and other words more or less rare, some 19 in all. The paroxytone accent may be referred to the diminutive idea, and in support of this may be cited 'die Kosennamen' (Brugmann, *Vergl. Gram.* II, p. 191), Θρασύλος, Σωίλος, Ὀνησίλος, Ταξίλος, Ἀγύλος, Ἡγύλος (also Χρεμύλος, written Χρέμυλος in L. and S.).

Adjectives in λος.

ποικίλος (√πικ = ? inclined to be) mottled.

ὀργίλος, inclined to anger.

κωτίλος, inclined to talk.

ἀγκύλος, curved.

αἰμύλος, glozing.

γογγύλος, round = (στρογγύλος, not cited by Wheeler).

δρτυμός, piercing (δριμός).

ἡδύλος, dim. ἡδύς.

καμπύλος, bent.

μικκύλος (μικρός).

στωμύλος, mouthy.

(ὀγκύλος, swollen, not cited by Wheeler.)

The form *πᾶχῦλος, of which the adv. παχυλῶς occurs, is not mentioned by Wheeler, although an incidental support to his theory.

For the word *αἰδύλος, given neither in Pape nor L. and S., Chandler quotes two authorities which accent it αἶδυλος, one only as paroxytone. All of these words in -υλος and -ιλος may be considered as diminutive in character. There remains one word in -ολος, i. e. αἰ-όλος. As the substantive αἰ-πόλος this also is probably a compound (√αι? = very and Φολ; cf. *volvo*).

As among the substantives so among the adjectives, a number of dactylic proparoxytones in αλος, ελος, etc., occur, e. g. αἶθαλος, ἱξαλος.

Substantives in pos.

No paroxytones, many proparoxytone dactylics, and one oxytone dactylic, πενθερός. (The dactylic περιστερός, censured by Lucian, *Soloecc.* 7, it would not be fair to cite.)

Adjectives in pos.

In this large oxytone category no (clear) changes to paroxytone occur, and we find the following dactylic oxytones: ἀλμυρός, ἀριστερός (ref. to by Wheeler, pp. 66 and 112), καρτερός (χλῖταρός), πτερός (mentioned by Wheeler). Attic οἰζυρός (for H. οἰζυρός).

Substantives in kos.

There is no paroxytone material unless the comparatively late¹ diminutives in *ískos* be included. These are all paroxytone, but with *trochaic* endings, to which combination the language shows elsewhere a constant repugnance. Does this not indicate that the language sought to accent the first syllable of the diminutive suffix, even to the ignoring of quantity? (See below.)

One dactylic oxytone occurs, *φαρμακός*; also two proparoxytone dactyls, *θύλακος* and *ψίττακος* (*ψιττακός* in L. and S.), but no paroxytone.

Adjectives in kos.

Out of 443 adjectives composing this large category, 305 are *dactylic oxytones*, the remainder *tribrach*. There are no paroxytones except the pronominal adjectives *πη-λί-κος*, *τη-λί-κος*, *ή-λί-κος*, and *όπη-λί-κος*. These with the adverbs *τηνίκα*, etc., would find an easy solution under Wheeler's law. Brugmann, II, p. 250, compares *πηλίκος*, *τηλίκος* to *qualis* and *talis*. Perhaps if it were possible to resolve them into their original elements the explanation of the accent might be clear.

Substantives in mos.

There is no paroxytone material, but amongst many recessives occur two dactylic oxytones, *ούλαμός* and *χηραμός* (both in use in the *Iliad*).

Adjectives in mos.

No paroxytone material; two dactylic oxytones occur, *μηδαμός* and *ούδαμός* (Hdt.).

In connection with *ἑβδομος* it is convenient here to refer to the other ordinals, as *δγδοος* and *τέτρατος*. Especial emphasis is to be laid upon this category, which in no instance availed itself of the supposed law in changing from the original oxytonesis (cf. *εἰκοστός*, etc., and see Whitney, *Sans. Gr.* §487).

ἡδυμος and others become proparoxytone.

Substantives in vos.

Wheeler explains the two puzzling words *παρθένος* and *καρκίνος* by his law. When the derivation of *παρθένος* is more clearly made out (see Curtius) the accent may perhaps explain itself. With *καρκίνος* Curtius compares *ἐχίνος* and *ικτίνος*. The suffix he says occurs frequently in names of animals; cf. also the list given by Brugmann. If *καρκίνος* is a mutilated reduplication for **καρκά-*

¹ Not in Homer; see Brugmann, *Vergl. Gram.* II, p. 259.

ρινος (see Brugmann, V. G. II, p. 90, who suggests *κυκύλος for κύκλος), perhaps the accent may have been thus obscured.

Along with a number of recessives occurs one dactylic oxytone, οὐρανός.

Adjectives in vos.

No paroxytone material. Among the oxytones (denoting 'in time of,' 'full of,' etc.) occur the dactyls δειλινός, εἰλῆινός (L. and S. recessive), ὀπωρινός and ὀρφανός.

Substantives in tos.

No paroxytone material. Dactylic oxytones are: αἰετός (αἰετός), ἕτερός, συρφετός.

Adjectives in tos.

No paroxytones. Dactylic oxytones are: αἰρετός, αἰνετός, ἀμαξιτός (cp.), ἐρπετός (ἐρπετόν), εὐρετός, ἄρκετός (late).

Substantives in ios.

In considering this suffix it must be remembered that only in some instances does it represent an original oxytone suffix. The material, though striking, will not offer much support to the 'dactylic law.'

"With the exception of the proper names, all paroxytones are of dactylic ending" (see Wheeler, p. 95). These nouns are four: σκορπίος, κωβίος and νυμφίος, γομφίος. Of these *κωβίος was generally oxytone (see Chandler, §246) and so only in L. and S.; νυμφίος is probably of a diminutive character (in the extended sense), cf. ἱστός and ἱστιόν; the same might be said of *γομφίος, unless it be considered as an adjective (cf. πρόσθιος and ὀπίσθιος, sc. ὁδοῦς); cf. Brugmann, p. 121. Moreover, the weight of authority is in favor of the proparoxytone accent; see Götting, p. 172, and Chandler, §246, and, finally, the Skt. *gámbhryas* points to original proparoxytone accent.

Dactylic oxytones in ios are ἀνεψιός, ἐρωδιός (ῥωδιός), χαραδριός. Other dactyls retract the accent, as ἥλιος, κάπριος, κύριος. Trisyllabic proper names, if *tribrachs*, are paroxytone, e. g. βαλῖος, Δολῖος, Ὀδῖος, Σχεδῖος, Τυχῖος, Χρομῖος, etc. (see Chandler, §247). Of these βαλῖος is from the oxytone adj. βαλιός. Of two exceptions to recession of the accent in polysyllabic proper names, Ἀσκληπιός is dactylic, the other is Ἰλλυριός.

Adjectives in ios.

As a rule these retract their accent, but there are two which, if original oxytones, would find their explanation in the dactylic law,

i. e. *μῦριος*, *πλησίος*. *ἀντίος* (*ἐναντίος*) may be compared with the noun *τὸ ἀμφίον* (not noticed by Wheeler), and with the adj. *πρώιος*. If these three are made with the suffix *-ος* directly from *ἀντί*, *ἀμφί* and *πρωί* (or *πρωί*) respectively, they would belong elsewhere; the paroxytone accent might be involved in the uniform oxytonesis of the prepositions *ἀντί* and *ἀμφί*, which, as trochees (see Wheeler, p. 100), do not permit anastrophe.

Diminutives in -ιον, etc.

But few words among these can be claimed as original oxytones. They are treated of, however, in this connection both because they are used in support of the 'dactylic law,' and because the whole subject of diminutives has a bearing upon the paroxytones in *-λος*, etc.

The term 'diminutive' is unsatisfactory. In addition to the three meanings of 'something small,' 'pretty,' or 'contemptible' (see Kühner), the term is here used as including the idea of 'pertaining to,' 'made of,' or 'connected with.' Such words as *ἰστίον* (sail), *χρυσίον* (gold coin or plate), *πεδίον* (plain, Fussboden), seem clearly to belong to the same category, whatever it be called, as *σφηκίον* (a cell in a wasp's nest), cited by Wheeler as a dactylic dim., or *κηρίον* (honeycomb), and they all must be regarded as bearing a similar relation to a real dim. like *παιδίον*, as *σφηκίσκος* (a piece of wood shaped like a wasp's tail, sometimes meaning large timbers) bears to *καδίσκος* (a ballot-box).

Chandler recognizes this difficulty, he says (p. 106): "*θηρίον* may be applied either to an elephant or to a bee; *χρυσίον* may mean a little bit of gold or merely a gold piece without any implication of smallness."

The rule is laid down that trisyllabic dim. of dactylic measure are paroxytone. As a matter of fact Chandler (p. 104) cites 29 tribrach diminutives with more or less authority for paroxytone accent, and in addition we find *πεδίον* (υ υ υ) always, *σκαφίον* commonly, and *βιβλίον* and *τεκνίον* have mute and liquid in the antepenult.

It seems probable that the language strove to accent the first syllable of the diminutive suffix. The only prominent exceptions to this would be some few trisyllables in *-ιον* and polysyllables in *-ιον* and *-διον*. These, however, offer no help to the 'dactylic law,' as tribrachs and dactyls fare alike.

e. g. υ υ υ *ἀνθρώπιον*, *ὀρνίθιον*, *ἐλάδιον*, *κρεάδιον*, *γεφύριον*, *γαλάκτιον*, *κώδιον*.

οοο ἀσπίδιον, λαμπάδιον, πινάκιον, δελφακίον, κοράκιον, πηγάδιον, ἀρμάτιον, etc.

To explain this recessive accent it may be urged that the diminutives in *ίδιον* were so numerous¹ that they might easily have affected words ending with the same sound, e. g. ἀσπίδ-ιον, while many neuter adjectives in *ιον* were used as diminutives retaining the recessive accent of the adjective.²

The other suffixes in *ιον* (those in *ίσκος*, *λος* and *ύλος* are treated of elsewhere) are polysyllabic, so that the accent cannot get off of the suffix. They are so numerous (nearly 30 extensions of *ιον*) that they, with *ίδιον* at the head of the list (see above), may well have influenced the others in *ιον* and *διον*.

The strongest argument for believing that the language had a tendency to accent the first syllable of the diminutive suffix is to be found in the paroxytone accent of trochaics in *ίσκος*. This goes directly against the usage of the Greek language elsewhere, which, for example, changes, in composition with *-γε*, the accent of *ἐγώ* to *ἐγωγε*, apparently to avoid this objectionable accent. See also the great mass of trochaic polysyllables, compound (passive) and simple.

Finally, it may be noticed that among these numerous suffixes many are dactylic, e. g. *τίδιον*, *υλλιον*, *αλλιον*, *ελλιον*, *ὑδριον* and *ἔχριον* and *ἱχνιον* (if *τεκνίον* and *βιβλίον* count as dactylic paroxytones).

In connection with neuters in *-ιον* may be considered such words as *μαλακίων* ('darling,' from oxytone *μαλακός*), *δειλακρίων* ('coward' or 'poor fellow,' adj. *δείλακρος*), *Ἀττικίων* ('little Athenian,' adj. *Ἀττικός*). These may serve as collateral evidence in favor of accenting the first rather than the last syllable of the suffix.

Compounds.

The following statistics are offered to show that there is no necessary connection between the paroxytone accent and the dactylic ending. No categories of words have been intentionally omitted except those in which no active compounds were noticed. 56 categories are given, of which 24 categories are necessarily dactylic, i. e. *-ηγόρος*, *-δρομος*, *-κλοπος*, *-κτονος*, *-πλοκος*, *-(σ)σοος*

¹ From a list made by Mr. F. R. Fraser it appears that out of 452 diminutives in Aristophanes and other Comic poets, the Tragedians and Plato, 212 have the simple termination *ιον*, 106 *ίδιον* or *άδιον* and 50 *άριον* or *ήμιον*.

² Cf. Brugmann (Vergl. Gram. II, p. 121). In nachhomerischen Zeit nahmen solche Neutra vielfach verkleinernde Bedeutung an, wie *ὀρνίθιον*, *ἐταιρίδιον* 'kleine Freundin,' *ἀσπίδιον* 'kleiner Schild,' etc.

(σάω), -(σ)σοος (σεύω), -σκοπος, -στολος, -στροφος, -στανος, -τροφος, -τροπος, -φθορος, -φθονος, -γλυφος, -γραφος, -ξοος, -προπος, -σκαφος, -(ρ)ροφος, -κτυπος, -(ρ)ραφος.

The other categories which may or may not have a long antepenult are: -πολος, -βορος, -μαχος, -μορος, -τομος, -κοπος, -μονος, -βολος, -γονος, -λοχος, -ποκος, -τυπος, -κορος, -νομος, -τοκος, -δοκος, -δομος, -κομος, -λογος, -πονος, -πορος, -φορος, -φονος, -τονος, -φαγος, -χοος, -τορος, -φοβος, -κολος, -θοος, -κοος.

The total number of active compounds was 516. Of these 232 were dactylic; 284 were tribrach.

If the *necessary* dactyls in the first 24 classes were excluded (i. e. 138) there would remain: dactylic, 94; tribrach, 284.

In this case there would be more than three times the number of tribrachs, but in any case there are many more tribrachs than dactyls. It is, therefore, hard to believe that the dactyls could have forced the accent of the more numerous tribrachs. We, therefore, are thrown back upon the old statement: "In active compounds the accent is regularly oxytone if the end of the word is trochaic; paroxytone if pyrrhic (whether tribrach or dactylic); if the word is passive (with the compounds of *ἀ-*, the prepositions, *ἐν-*, *δυσ*, etc.) the accent is recessive whether trochaic, dactylic or tribrach." In other words, tribrach and dactylic endings fare exactly alike. In trochaic endings the tendency to recession, usual in compounds, was entirely stifled by the negative dislike of the combination $\acute{\cup}$, or possibly by the tendency, above cited, 'dem Hochtön eine lange Silbe immer vorauszuschicken.' When the last member was a dissyllable with a short penult the accent receded as far as it could without leaving the last member; in the case of the trisyllabic *-ηγορος* the accent avoided the antepenult just as it avoided the penult in trochaics.

In the above statistics some compounds, possibly some categories, may have been omitted, but it is unlikely that any appreciable change from the above proportion would be found to exist.

Anastrophe of Prepositions.

As the second member of some compounds necessarily gives a dactylic ending, so do a number of combinations of prepositions in anastrophe. But the number of possible tribrach combinations is greater than might be supposed, e. g. *νηυσὶν ἐπι*, *νῆας ἐπι*, *χερσὶν ὑπο*. In six books of the Iliad, i. e. Bks. VII-XII, selected at

random, all the instances of anastrophe were examined. There are in all 41 examples (leaving out the doubtful verse 531, Bk. X, and the example with elision, v. 264, Bk. XII, viz. *βάλλον ἄπ'*); of these 20 are dactylic, 21 tribrach (or 22 tribrach if the doubtful verse, 531, were included). It might also be urged that several of the dactyls really shorten the first syllable before the vowel, e. g. VIII 279, *τόξον ἄπο*, and could not have been felt as dactylic combinations. Apparently dactylic and tribrach combinations fare alike. If Wheeler's account (p. 100) of the trochaic prepositions and his dismissal of *ἀνά* and *διά* be correct, it is an interesting coincidence, but it would only tend to strengthen what is claimed above, that the Greeks objected to paroxytone trochaic, but not to paroxytone pyrrhic endings when, for any reason, the recession of the accent was checked half-way and the accent fell upon the penult.

Miscellaneous forms.

No attempt will be made here to examine in detail the accent of the ptc. in *-μένος* and the paroxytone adverbs adduced by Wheeler in applying his law. It is probable that a more certain explanation of the genesis of the perf. pass. ptc. would throw light upon its peculiar accent.

In regard to the adverbs in *άκis* it may be argued that forms like *ένάκis* (also *έννάκis*), all those from *δεκάκis* up to *είκοσάκis*, *διακοσιάκis*, *χιλιάκis*, *μυριάκis*, in addition to those mentioned by Wheeler, may have had equal weight with the dactylic. One other category may be adduced for comparison: if those in *-αδis* were originally oxytone the law might have been expected to apply here. Of 9 examples quoted by Chandler (most of them late Greek) 7 are paroxytone; of these 5 are tribrachs, including the Homeric *χαμάδis*; two only of these paroxytones are dactylic, i. e. *έσχάδis* and *όκλάδis* (not in L. and S. and Pape). The only two which are not paroxytone are dactylic, i. e. *ώμαδis* and *οϊκαδis*.

In conclusion it may be claimed that each category of paroxytone words should be examined separately before deciding that all tribrach paroxytones were so accented by analogy with the dactylic. When in addition to words in *τέος* (e. g. *ποτέος*) and the Homeric words like *ἀρπυγέος*, *ἄξυλέος*, *θαρσυλέος*, *σμερδαλέος*, all the paroxytone material is taken together, it will be seen that there is no inconsiderable number of tribrach forms.

F. G. ALLINSON.

IV.—THE EVOLUTION OF THE LORD'S PRAYER IN ENGLISH.

In order to trace the successive steps by which the Lord's Prayer attained to its present form in English, it is necessary to begin with the oldest versions. Besides one semi-poetical and three poetical paraphrases, there are at least five Old English renderings of the prayer as given in Matthew, and three of that in Luke. Two of the renderings of the form in Matthew are by Ælfric, one is represented by a manuscript of Corpus Christi College, Cambridge, as printed in Skeat's edition of *The Gospel according to Saint Matthew*, one is the Northumbrian gloss, and the other the (probably) Mercian gloss, both printed in Skeat's edition. The versions of the Lucan form correspond to the last three mentioned. It is to be observed that the first three are West Saxon, and that these alone are translations, the Lindisfarne and Rushworth renderings being only interlinear glosses. All are comparatively late, in their present forms not earlier than 950 to 1000 A. D., as nearly as can be ascertained.

The typical or standard Old English form, obtained from a comparison of all the prose versions, would not greatly differ from that which is here subjoined.¹

Úre Fæder, ðú ðe eart on heofonum, si ðín nama gehálgod.
Tócume ðín rice. Geweorðe ðín willa on eorðan swá swá
on heofonum. Sele ús tó-dæg úrne dæghwamlican hláf.
And forgif ús úre gyltas,² swá swá we forgifað úrum gylten-
dum.³ And ne læd ðú ús on costnunge. Ac álýs ús fram
yfele. Si hit swá.

A literal translation, adhering to the order of the words, would be:

Our Father, thou that art in heavens, be thy name hal-
lowed. Come (Tocume) thy kingdom. Become thy will in
earth as (so as) in heavens. Give us (to us) to-day our daily
(daywhomly, the second syllable being distributive) bread
(loaf). And forgive us (to us) our guilts, as (so as) we for-
give our (to our) offenders (guilting ones). And not lead
thou us into temptation. But release us from evil. Be it so.

¹ See Appendix I.

² Or, scylda.

³ Or, scyldigum.

If this be compared with the Authorized Version, and allowance be made for the difference between the ancient and the modern forms of the same words, it will be seen that only the following words are obsolete: *ðe* (A. V. *which*), *sí* (A. V. *be*), *rice* (A. V. *kingdom*), *geweorðe* (A. V. *be done*; *weorðe* still survives in 'Woe worth the day!'), *sele* (A. V. *give*; *sele* now has the meaning 'sell'), *-hwam-* (in *dæghwamlīcan*), *gyllendum* (A. V. *debtors*), *ne* (A. V. *not*), *costnunge* (A. V. *temptation*), *ac* (A. V. *but*), *dlȳs* (A. V. *deliver*; the second syllable preserved in *release*). Besides, the A. V. substitutes *this day* for *to-day*, *bread* for *loaf* (*hlāf*), *debts* for *guilts* (*gylltas*), the *Amen* of the original for *Sí hit swá*, and inserts *it is* before the second *in heaven*. It further omits *thou* (twice), places the subject before the optative of the second and third sentences, transposes the negative, reduces the plural *heavens* to the singular, and *as as* (or *so as*) to *as*. To these changes must be added the insertion of the doxology, *For thine*,¹ etc. Let us see at what periods these changes were effected.

The next English translation was by Wyclif (1380 or thereabouts). His text of the Lord's Prayer reads:

Oure fadir that art in hevenes, halewid be thi name. Thi kyngdome come to. Be thi wille don in erthe as in hevene.²
 ȝyve to us this dai oure breed over othir substaunce. And forȝyve to us oure dettis, as we forȝyven to oure dettouris. And lede us not in to temptacioun. But delyvere us fro yvel.³
 Amen.

The Wycliffite version, like the Old English, was made after the Vulgate. This will account for the phrase 'over othir substaunce,' which is an attempt at rendering the unmeaning Latin *supersubstantialem*.[?] Only the Lindisfarne glossator had attempted this before, the other translators having invariably recurred to the *quotidianum* of Luke (or of the Old Latin). In Lind. the gloss is *oferwistlic*, the *ofer* translating *super*, and *wistlic*, *substantialem*. Wyclif has, for the *quotidianum* of Luke, the phrase *ech daies*.

We observe that already the indeclinable relative *ðe* (*the*, not to be confounded with our article *the*) has given place to *that* (the

¹ The doxology is found in the Gothic version of Ulfilas. See Appendix II.

² *First version*, As in heaven and (*one MS.*, so) in erthe.

³ *First version adds, that is, so be it.* Otherwise the differences between the two versions are merely in spelling, except for the variations of particular manuscripts. These are sometimes important; thus, 'Thi wille be don,' and again, 'In erthe as it is in hevene,' 'Ech dayes breed.'

O. E. *ðæt*, *rice* (Germ. *Reich*) to *kingdom*, *geweorðe* to *be . . . done*, *sele* to *give*, *hlāf* to *bread*, *gylltas* to *debts*, *gyllendum* to *debtors*, *ne* to *not*, *costnunge* to *temptation*, *alýs* to *deliver*, and *Sī hit swā* to *Amen*. The plural *heavens* is retained at its first occurrence, but becomes the singular at its second. The new words introduced are all derived from Old English, with the exception of *debts*, *debtors*, *temptation*, *deliver*, and *Amen*. Of these the first three are the Latin words of the Pater Noster, merely Anglicized, in the fourth the Latin word (*libera*) with the prefix *de*, and the fifth the original Latin (Hebrew) unchanged. The order of words in the phrase 'hallowed be' is that of the Lindisfarne and Rushworth glosses to the Lucan text (see Appendix I), and hence appears to be of Northern (Anglian) origin. In the next clause the subject is now first, but in the third it is enclosed by the auxiliary and past participle of the passive, *be . . . done*. The sign of the dative, *to*, is expressed, whereas in the Old English it is understood from the case-form. *Not* is now in its modern place, after the object of the verb *lead*, instead of before that verb. The *come to* after *kingdom* is found in the Rushworth gloss to the prayer in Matthew, though it there precedes the subject (see Appendix I).

There accordingly remain these changes to be made in later versions, in order to conform the Wycliffite to the Authorized Version: *that* to *which*, *heavens* to *heaven*, *come to* (*adveniat*) to *come* [*be thy will* to *thy will be*, as to *as it is*], *to-day* to *this day*, *over other substance* (*supersubstantialem*) to *daily*, the omission of the dative sign, and the addition of the doxology.

The version by Tyndale (1534) goes a little further. It substitutes *which* for *that*, *heaven* for *heavens*, *as it is*¹ for *as*, *this day* for *to-day*, *daily* for *over other substance* (thus going back to the O. E.), omits the dative sign, and adds the doxology. On the other hand, it retrogrades in some respects, reading, *Let thy kingdom come, fulfilled* for *done*, *as well in earth, trespasses* and *trespassers*. With the latter we have no particular concern. The Cranmer Matthew (1539) goes back to *debt* and *debtors*, but is otherwise unchanged from Tyndale, except that *O our* becomes *our*.

The Geneva Bible (1557) is the first that reads *Thy will be done*.² On the other hand, it inserts *even* after *done* and *debts*. Otherwise it is like the Cranmer. The Rheims version (1582)

¹ Already in one or more copies of the Wyclif version.

² If we except the variant reading of Wyclif.

recurs to the Latin, and is less modern than the last two. Finally, the A. V. makes the last change necessary, abandoning the *Let thy kingdom come* of Tyndale and his successors, and returning to the *Thy kingdom come* of Wyclif, only dropping his appended *to*.

The Revised Version makes several innovations: 'As in heaven, so on earth';¹ 'also have forgiven'; 'bring' for 'lead' (like the Gothic); 'the evil one' for 'evil'; besides omitting the doxology, with the O. E. and Wycliffite versions (and the Rheims).

To return to the original O. E. version assumed as a standard, all but five of the thirty-five different words it contains exist as independent words to-day. Of these five, one, *rice*, is the last syllable of *bishopric*, and another, *álys*, has exchanged its old prefix for a new. Of the thirty-eight different words in the A. V., exclusive of the doxology, only five are other than Old English.

APPENDIX I.

The versions by Ælfric, to which reference is made in the text, are contained in Thorpe's edition of Ælfric's Homilies, on pages 258 of the first volume and 596 of the second volume respectively. These are denoted by Ælf. 1 and Ælf. 2. In the homily which contains Ælf. 1, the successive clauses of the prayer are again translated as they are commented upon, thus occasioning a number of variants from Ælf. 1. The Cambridge manuscript of the Gospels (C. C. C. C. 140) is taken as the representative of the standard West Saxon version, and is denoted by Corp.; Lind. and Rush. stand for the Lindisfarne and Rushworth glosses respectively.

For the convenience of the student, the text of the Latin Vulgate and those of the various Old English renderings are here presented clause by clause, the accents of the MSS being disregarded. When Ælf. 1 and its variant are identical, the variant is not entered.

Vulg.	Pater noster, qui es in cœlis.
Ælf. 1.	ƿu ure Fæder, ƿe eart on heofonum.
Ælf. 1 var.	Ure Fæder, ƿe eart on heofonum.
Ælf. 2.	Ðu ure Fæder, ƿe eart on heofonum.
Corp.	Fæder ure, ƿu ƿe eart on heofonum.
Lind.	Fader urer, ðu bist (<i>var.</i> arð) in heofnum (<i>var.</i> heofnas).
Rush.	Fæder ure, ƿu ƿe in heofunum earð.

¹A Wycliffite phrase.

Vulg.	Sanctificetur nomen tuum.
Ælf. 1.	Sy þin nama gehalgod.
Ælf. 2.	Sy ðin nama gehalgod.
Corp.	Si þin nama gehalgod.
Lind.	Sie gehalgad noma ðin.
Rush.	Beo gehalgad þin noma.
Vulg.	Adveniat regnum tuum.
Ælf. 1.	Cume ðin rice.
Ælf. 2.	Gecume þin rice.
Corp.	Tobecume þin rice.
Lind.	Tocymeð ric ðin.
Rush.	Cume to þin rice.
Vulg.	Fiat voluntas tua.
Ælf. 1.	Sy ðin wylla.
Ælf. 1 var.	Geweorðe ðin wylla.
Corp.	Gewurpe ðin willa.
Lind.	Sie willo ðin.
Rush.	Weorpe þin willa.
Vulg.	Sicut in cœlo, et in terra.
Ælf. 1.	On eorðan swa swa on heofonum.
Ælf. 2.	Swa swa on heofenum swa eac on eorðan.
Corp.	On eorðan swa swa on heofonum.
Lind.	Suæ is in heofne and in eorðo.
Rush.	Swa swa on heofune swilce on eorpe.
Vulg.	Panem nostrum supersubstantialem da nobis hodie.
Ælf. 1.	Syle us todæg urne dæghwamlican hlaf.
Ælf. 1 var.	Syle us nu todæg urne dæghwamlican hlaf.
Ælf. 2.	Syle us todæg urne dæghwomlican hlaf.
Corp.	Urne gedæghwamlican hlaf syle us todæg.
Lind.	Hlaf userne oferwistlic sel us todæg.
Rush.	Hlaf userne (<i>var. ure</i>) dæghwæmlicu (<i>var. instondenlice, reading substantialem</i>) sel us todæge.
Vulg.	Et dimitte nobis debita nostra.
Ælf. 1.	And forgyf us ure gyltas.
Ælf. 1 var.	Forgif us ure gyltas.
Ælf. 2.	And forgyf us ure gyltas.
Corp.	And forgyf us ure gyltas.
Lind.	And forgef us scylda usra.
Rush.	And forlet (<i>reading remitte</i>) us ure scylde.

Vulg.	Sicut et nos dimittimus.
Ælf. 1.	Swa swa we forgyfað.
Ælf. 2.	Swa swa we forgyfað.
Corp.	Swa swa we forgyfað.
Lind.	Suæ uoe forgefōn.
Rush.	Swa swa we ec forleten (<i>reading</i> remittimus).
Vulg.	Debitoribus nostris.
Ælf. 1.	Ðam þe wið us agyltað.
Ælf. 1 var.	Ðam mannum þe wið us agyltað.
Ælf. 2.	þam ðe wið us agyltað.
Corp.	Urum gyltendum.
Lind.	Scyldgum usum.
Rush.	þæm þe scyldigat wið us.
Vulg.	Et ne nos inducas in tentationem.
Ælf. 1.	And ne læd ðu na us on costnunge.
Ælf. 1 var.	Ne geðafa, ðu God, þæt we beon gelædde on costnunge (see the Latin text of the Rushworth).
Ælf. 2.	And ne læd þu na us on costnunge.
Corp.	And ne gelæd þu us on costnunge.
Lind.	And ne inlæd usih in costunge.
Rush.	And ne gelaet us gelaede in constungae (<i>reading</i> Et ne patiaris nos induci in t.).
Vulg.	Sed libera nos a malo.
Ælf. 1.	Ac alys us fram yfele.
Ælf. 2.	Ac alys us fram yfele.
Corp.	Ac alys us of yfele.
Lind.	Ah gefrig usich from yfle.
Rush.	Ah gelese us of yfle.
Vulg.	Amen.
Ælf. 1.	Sy hit swa.
Ælf. 2.	Sy hit swa.
Corp.	Soplice.
Lind.	(This and Rush. are lacking, both Latin and gloss.)

The text of the Lucan version is as follows:

Vulg.	Pater, sanctificetur nomen tuum.
Corp.	Ure fæder, þu ðe on heofone eart (from text of Matt.), si þin nama gehalgod.
Lind.	Fader, gehalgad sie noma ðin.
Rush.	Fæder user, seðe is on heofnum (from text of Matt.), gihalgad bið noma ðin.

Vulg.	Adveniat regnum tuum.
Corp.	Tocume þin rice.
Lind.	Tocymæð ric ðin.
Rush.	Tocymeð rice ðin.
Vulg.	(Text of Matt. lacking.)
Corp.	Gewurðe ðin willa on heofone and on eorþan.
Lind.	(Lacking.)
Rush.	Sie willa ðin sie swa on heofne and on eorðo (Latin from Matt.).
Vulg.	Panem nostrum quotidianum da nobis hodie.
Corp.	Syle us todæg urne dæghwamlican hlaf.
Lind.	Hlaf userne dæghuæmlice sel us eghuelc dæge (<i>reading</i> cotidie).
Rush.	Hlaf userne dæghwæmlice sel us todæge.
Vulg.	Et dimitte nobis peccata nostra.
Corp.	And forgyf us ure gyltas.
Lind.	And forgef us synna usra.
Rush.	And forgef us synne use.
Vulg.	Siquidem et ipsi dimittimus.
Corp.	Swa we forgyfað.
Lind.	Gif fæstlice æc we forgesæs.
Rush.	Swa (<i>reading</i> sicut) fæstlice and ec he (<i>var.</i> we) for- geofas.
Vulg.	Omni debenti nobis.
Corp.	Ælcum þara þe wið us agyltað.
Lind.	Eghuelc scyldge us.
Rush.	Eghwelce scylde user (<i>reading</i> debitoribus nostris).
Vulg.	Et ne nos inducas in tentationem.
Corp.	And ne læd þu us on costnunge.
Lind.	And ne usic onlæd ðu in costunge.
Rush.	And ne usih onlæd ðu in costunge.
Vulg.	(Text of Matt. lacking.)
Corp.	Ac alys us fram yfele (from text of Matt.).
Lind.	(Lacking.)
Rush.	Ah afria usih from yfle (from text of Matt.).

APPENDIX II.

The earliest Teutonic translation is the Gothic (before 380 A. D.), which is here reproduced, with an interlinear translation, for comparison with the Old English. It will be noted that it has the doxology at the end.

Atta unsar, þu in himinam, weihnai namo þein.
 Father our, thou in heavens, be sanctified name thine.

Quimai piudinassus þeins. Wairþai wilja þeins swe in himina
 May come kingdom thine. Become will thine as in heaven

jah ana airthai. Hlaf unsarana þana sinteinan gif uns himma
 also on earth. Bread (loaf) our the daily give us this

daga. Jah aflet uns þata skulans sijaima, swaswe
 day. And forgive (let off) us that owing (we) may be, as

jah weis afletam þaim skulam unsaraim. Jah ni
 also we forgive (let off) (to) the debtors our. And not

briggais uns in fraistubnjai, ak lausei uns of þamma ubilin.
 bring us into temptation, but loose us from the evil.

Unte þeina ist þiudangardi, jah mahts, jah wulþus, in aiwins.
 For thine is kingdom, and might, and glory, in eternity.

Amen.

Amen.

ALBERT S. COOK.

NOTES.

AVESTAN ETYMOLOGIES.—I.

1.—Av. *vōiždayantat-*, *vōiždaŋ*.

The word *aiwi.vōiždayantahe* Ys. 9. 31 has long been a troublesome one. The passage where it occurs contains an appeal to Haoma to ward off various enemies. The text reads:

paiti mašyehe drvatō sāstarš
aiwi.vōiždayantahe kamərəðəm
kəhrpəm nāšəmnāi āšaone
haoma zāire vadarə jaīdi. Ys. 9. 31.

‘Against the body of the wicked man, the tyrant . . ., in behalf of the righteous man that perishes, O golden Haoma, hurl thy weapon.’

To explain the verse, *kamərəðəm* has sometimes been considered a gloss (Geldner, *Metrik*, p. 134; de Harlez, *Manuel*, p. 186), but its genuineness is rightly now assured, and in Geldner’s new edition of the texts the verse is given as one of ten syllables in accordance with his *Metrik*, p. 118, where the line is so treated. Neryosangh’s Skt. version of the passage also shows *mastakē*. The word *kamərəðəm* furnishes the objective accusative to *aiwi.vōiždayantahe*.

For the uncertain participial form *vōiždayant-* an etymology may now be suggested. The stem-form *vōižda-* is to be identified with none other than the Skt. $\sqrt{vīḍ}$ ‘to be strong, be mighty, firm.’ Observe the Skt. cerebral *ḍ*. The root in Av. will be *vīžd-*.

Av. $\left\{ \begin{array}{l} vīžd- \\ vōižda- \end{array} \right. : \text{Skt. } \left\{ \begin{array}{l} vīḍ- \\ (vēḍa-) \end{array} \right. :: \text{Av. } \left\{ \begin{array}{l} zīzd- \\ zōižda- \end{array} \right. : \text{Skt. } \left\{ \begin{array}{l} hīḍ \\ hēḍa. \end{array} \right.$

Similarly Av. *mīžda-* = Skt. *mīḍha-* and others. The strong form *vōiždayant-*, moreover, is to be compared with Skt. *hēḍayant-*. The prefix *aiwi* seems to be intensive as in *aiwinasant-*, *aiwi.aojah-*, *aiwyāma*, etc. Thus *aiwi.vōiždayantahe kamərəðəm* will characterize the tyrant *sāstār-* as ‘making his head too mighty,’ i. e. exalting it too high. It is an expression that

denotes overweening power;' the head (as sometimes in the Bible the head of the wicked, Ezek. ix. 10) is put for the whole person. Observe of course that *kamərəða-* is an Ahrimanian word.

The passage Ys. 9. 31 may now be rendered: 'Against the body of the wicked man, the tyrant that too much exalteth himself (lit. making his head too mighty), O golden Haoma, hurl thy weapon.'

This etymology suits well in a passage in the Gāthās, Ys. 32. 10, where the same verb occurs:

*hvō mā nā sravāō mōrəndaŋ yē acištəm vaēnanhē aogədā
gəm ašibyā hvarēcā yascā dāpəng drəgvatō dadāt
yascā vāstrā vīvāpaŋ yascā vadarē vōiždaŋ ašāunē.* Ys. 32. 10.

'That man destroyed my teachings who said it is the worst thing to look upon the cow and the sun, and who made the faithful wicked, who laid the pastures waste, and who made strong the weapon against the righteous.'

The identity of the root Av. *vīzd-*, *vōižda-* = Skt. *vid-* in Av. *vōiždayant-*, *vōiždaŋ-*,² seems, therefore, sure; perhaps, however, the more original meaning of both was 'lift up, raise, raise into place, fit, strengthen.'

2.—Av. *zōišnu-*.

Examples of the euphonic change orig. *dn* = Av. *n*—as in Av. *garənu-* = Skt. *gṛdhnú-*; Av. *buna-* = Skt. *budhná-*; Av. *sanaŋ* = **sadnat*—have been given by the present writer in Am. Or. Soc. Proceedings, May, 1889, p. cxxv. A new instance to be added to the list is Av. *zōišnu-*. This word is formed with the suffix *-nu* from the root Av. *√zīzd-*, *zōižd-* which appears in *zōiždišta-*. This latter adjective occurs in the familiar phrase *yapa zōiždištāiš hrafstrāiš* Vd. 7. 2, etc., 'as the most hateful (or malicious) Khrafstras.' Its etymology becomes clear when we identify its radical element with Skt. *√hīd-*, *hīd-* 'be hostile, malicious,' cf. Av. *√vīzd-*, *vōižd-*, = Skt. *√vid-* above.³ Thus *zōišnu-* stands for *zōiž^dnu-*—*šn* for *zn*, as *rašnu-*, *barəšnu-*, etc. The word is both

¹ Like the Biblical expression 'exalting the horn.'

² The form *vōiśdyāi* in Justi, Handbuch, should be *vōiśdyāi* (i. e. *z*); it does not, therefore, belong here, but is rightly given by Justi to *√vid-* 'find, acquire.'

³ The identification of Av. *zōižd-* with Skt. *hīd-* I since find has likewise been noted by von Bradke, in K. Z. xxviii, p. 295.

substantive and adjective. (1) As substantive *zōišnu-* means 'hatred, malice, enmity'; (2) as adjective it is 'hateful, hated.'

As adjective *zōišnu-* is found in Vd. 7. 70, which deals with the treatment of a woman whose body is defiled by a miscarriage, *yezica hē ham tafnō jasāt avi tanuye zōišnuye*, 'and if the fever come upon her hateful body.' The unclean woman's body is loathed as if she were impure or *pəšō-tanuye*.

The substantive use of *zōišnu-* I find in the Gāthās, Ys. 51. 12. The form there is *zōišənū-*, the (ə) by anaptyxis. This difficult verse, Ys. 51. 12, was last treated, as far as I know, by Geldner in K. Z. xxx, p. 524. He made the whole tenor of the verse clear by an excellent identification of Av. *aodar-* 'cold, frost' with Skt. *ūdhr-*. The etymology of *zōišnu-* now suggested, however, may lead to a remodelling of the construction of the last part of the verse. The text runs:

nōiṭ tā im ḥšnāuš vaēpyō kəvinō pəratō zimō
zaraḥpuštrəm spīlāməm hyaṭ ahmī urūraost aštō
hyaṭ hōi im caratascā aodərəscā zōišənū vāzā. Ys. 51. 12.

In *zōišənū vāzā* I see a dual, a dvandva, which forms the subject of *caratas*. The noun *zōišənū* then is 'malice, rancor, fierceness,' and Av. *vāzā* is to be identified, as Justi s. v., with Skt. *vāja-* 'strength.' On Skt. *vāja-* 'strength, force,' see also Pischel in Pischel-Geldner, Ved. Stud. p. 11 n. Thus *aodərəscā zōišənū vāzā* will be 'the fierceness and strength of the cold,' or by hendiadys the 'malicious blast of the cold'; cf. *pəratō zimō* in the first line. The difficult verse Ys. 51. 12 may now perhaps mean: 'Not thereby did the heretic Vaepya delight Spitama Zarathushtra in the depth of winter when he hindered him (Zoroaster) from finding shelter with him even when the fierce strength of the cold also (lit. the malice and strength) were coming upon him.' The pronoun *im* refers both times to Zarathushtra; *hōi* (Vaepya) is ethical dative; *caratas* (dual) is historical present.

The idea of the horror and dread of winter and cold is quite Zoroastrian, *aodərəscā zōišənū vāzā* is consistent with *pəratō zimō*. The Pahlavi version of Ys. 51. 12 seems to contain a glimmer of this same idea, if we could but better understand the version. Mills, S. B. E. xxxi, p. 183 note ad loc. finds in the Phl. rendering of *aodərəscā* z. v. 'in the cold [of a winter] of accustomed sin (or in the cold iniquitous winter).' The phrase *pəratō zimō*, and perhaps even *caratasca*, needs further investigation.

A. V. WILLIAMS JACKSON.

ON THE INFINITIVE AFTER EXPRESSIONS OF FEARING IN GREEK.

It is a well known fact that in Greek and Latin the infinitive and the subjunctive (or optative) are regularly used after verbs of fearing in two easily distinguishable senses: *δέδοικα εἰλεῖν*, vereor ire = 'I am afraid to go, do not dare to go'; *δέδοικα μὴ εἰλω*, vereor ne eam = 'I am afraid that I may (or shall) go.' It is well known also that the Latin poets occasionally neglect this distinction, using the infinitive after *metuo* and *timeo*, where *ne* with the subjunctive would be normal. Thus, when Horace writes (Ep. I 7, 4-5),

Quam mihi das aegro, dabis aegrotare timenti,
Maecenas, veniam,

it is clear that *aegrotare timenti* is equivalent to *timenti ne aegrotet*. But careful scholars often ignore or deny the existence of a similar license in Greek.¹ The phenomenon does, however, present itself there, and, in one respect, has a wider range than in Latin. In reputable Latin, namely, so far as I am aware, we do not meet with expressions such as *timeo eum aegrotare* (or *aegrotaturum esse*) in the sense 'I fear that he will be sick';² whereas in Greek the verb of fearing and the dependent infinitive may have different subjects. Without attempting a systematic search, I have noted in the tragic dramatists several instances of the license in question. They are not all equally certain, but the weaker cases derive confirmation from the stronger. The two passages from the Septem have been variously construed, but I

¹ In the new edition of Goodwin's Greek Moods and Tenses, §372, the use of the *future* infinitive after verbs of fearing in the sense of *μὴ* with the subjunctive is recognized and one example is cited from Thucydides. Prof. Gildersleeve has kindly called my attention to the fuller recognition of my principle by Kühner, Gram. p. 1045 Anmerk., and Aken, Tempus und Modus, §168. Kühner supplies an example not noted by me in Eur. Hec. 768; Aken others in Lys. 23, 12 (this one I think should be omitted), Plut. Philop. [18], Plut. Crass. 34 (sic). Aken is wrong in denying the corresponding usage in Latin, as well as in denying that the infinitive may have a different subject from the verb of fearing.

² Madvig says (Lat. Gram. §376, Obs.): "*Timeo* and *metuo* are rarely found with the accusative and infinitive, with the signification, to expect with apprehension that something will happen." No examples are quoted, and I believe the statement should be amended by striking out the words "accusative and."

have not thought it necessary to discuss the different explanations.

1. Aesch. Sept. 417-21:

τὸν ἄμὸν νυν ἀντίπαλον εὐτυχεῖν
θεοὶ δοῖεν, ὥς δικαίως πόλεως
πρόμαχος ὄρνυται· τρέμω δ' αἵματη-
φόρους μόρους ὑπὲρ φίλων
ὀλομένων ιδέσθαι.

Considering the context, the translation of *τρέμω ιδέσθαι* by 'I am afraid (do not dare) to see,' would be unsatisfactory. The sense evidently required is, 'but I fear that I shall behold the blood-stained corpses of men slain for their friends.'

2. Aesch. Sept. 720 ff.:

πέφρικα τὰν ὠλεσίοικον
θεόν, οὐ θεοῖς ὁμοίαν,
παναληθῇ, κακόμαντιν,
πατρὸς εὐκαταῖαν Ἑρινὺν
τελέσαι τὰς περιθύμους
κατάρas Οἰδιπόδα βλαψίφρονος·
παιδολέτωρ δ' ἔρις αἰδ' ὀτρύνει.

τελέσαι here is regarded by Prof. Goodwin (Moods and Tenses, §373) as an ordinary case of the infinitive after a verb of fearing. But if the construction is really analogous to that of Demosthenes's *τίς οὐκ ἂν ἔφριξε ποιῆσαι* (559, 8), it would seem that we are obliged to translate, 'I shrink from the Fury's fulfilling the curses,' rather than, with Prof. Goodwin and others, 'I shudder at the idea of the Fury fulfilling.' That would be a feeble utterance, while, 'I fear that the Fury may fulfill,' answers thoroughly to the situation.

3. Soph. Aj. 254-5:

πεφόβημαι λιθόλευστον Ἄρη
ξυναλγεῖν μετὰ τοῦδε τυπείs.

The thought immediately preceding is, 'It is time to be off, for the Atridae are threatening us,' and the quoted words probably mean, 'I fear that I shall be assaulted with Ajax and share the painful death by stoning.'

4. Eur. Ion, 1564-5:

θανεῖν σε δείσας μητρὸς ἐκ βουλευμάτων
καὶ τήνδε πρὸς σοῦ, μηχαναῖs ἐρρύσατο.

'Fearing that you would perish by your mother's schemes and she by your hand, he contrived deliverance.'

5. Eur. Med. 1256-7:

θεοῦ δ' αἵματι πίτνειν
φόβος ὑπ' ἀνέρων.

aĩmati is corrupt (*pace* Dr. Verrall), but, however it is emended, the sense must be, 'We fear that divine blood will be shed by man.'¹ That this rendering does not ascribe to Euripides any extraordinary ignorance of his "moods and tenses" (see this Journal, Vol. III, p. 347 at bottom), seems to me certain.

F. B. TARBELL.

TWO *Sprüche* OF WALTHER VON DER VOGELWEIDE.

31, 33.

In nomine dumme ich wil beginnen: sprechent amen
(daz ist guot für ungelücke und für des tievels sâmen),
daz ich gesingen müeze in dirre wise alsô,
swer höveschen sanc und fröide stœre, daz der werde unfrô.

This is Lachmann's punctuation of the first four verses. All later editors, except von der Hagen, follow him, and thereby commit themselves to a complicated interpretation. Apart from the awkward parenthesis, Lachmann seems to prescribe a translation something like this: 'Say Amen to that, (and wish) that I may sing in this strain in such a manner that whoever hinders courtly song and joys may be rendered unhappy.'

Uhland's version of the passage (Schriften, V 60, published 1822) appears to have been neglected or forgotten:

'In nomine domini! ich will beginnen, sprechet: Amen!
Das ist gut für Ungelücke und für des Teufels Samen.
Das ich nun singen müsse in dieser Weise also,
Wer höfischen Sang und Freude störe, dass der werde unfroh!'

This rendering of the first two verses is more simple and natural in tone than is possible in any translation entangled in Lachmann's punctuation. But in the third and fourth verses the sense labors; and for this, Walther's usually perspicuous style can scarcely be made responsible. The difficulty appears to be due rather to the

¹ Homer furnishes two parallel cases:

σοὶ δ' οὐ δέος ἐστ' ἀπολέσθαι. M. 246.
οὐδέ τί τοι παθεῖν δέος οὐδ' ἀπολέσθαι. ε. 347.

supposition that the first verse contains a serious invocation. Assuming this latter to be, on the contrary, a parody, the following new punctuation is now offered :

In numme dumme ich wil beginnen : sprechent, Amen !
 daz ist guot für ungelücke und für des tievels sâmen,
 daz¹ ich gesingen müeze in dirre wise alsô.
 swer hoveschen sanc und fröide stære, daz der werde unf rô !

The first verse is a taunting variation of the pious flourish with which dull epic singers at court² began their narrations. Wilmanns³ 181 has made an instructive collection of such phrases, citing the poems;⁴ but no editor appears to have noticed in this passage Walther's bitterly satirical use of the most characteristic turn of them all. There is ground for supposing that the epic poets and *spilliute* were among his best-hated and most persistent rivals (Wilmanns, *Leben* 286, and the authorities cited on p. 456); and they—and their like—appear to be the cause of our poet's lament (32, 1-4):

ich hân wol und hovelichen her gesungen:
 mit der hovescheit bin ich nû verdrungen,
 daz die unhoveschen nû ze hove genæmer sint dann ich.
 daz mich êren solde, daz unêret mich.

It is, therefore, with a touch of comic pathos that Walther emphasizes his hatred by beginning the *spruch* in the droning style of these poetasters:⁴

'In numme dumme I will begin: say, Amen! It is good

¹ For this construction with *daz*—*daz*, cf. 78, 35 *daz ist uns ein tröst vor allem tröste, daz man dâ ze himel ir willen tuot*.

² I assume, with Lachmann (p. 199), that this *spruch* was sung in Austria. But cf. Wilmanns³ 182, and *Leben* 57. For a synopsis of the views of earlier authorities cf. Menzel 158-161.

³ Cf. Uhland, III 329. Mr. B. J. Vos has kindly furnished the following additional parallel, from the invocation in Heinr. v. Veldeke's *Servatius* :

In Gods namen ende in sÿnen vreden
 Soe beghennen wÿ deser reden
 Ende spreken inden beghinne aldus :
 Sancti Spiritus
 Assit nobis gracia !

⁴ Cf. 103, 37 '*ich und ein ander tûre, wir dânen in sîn ôre, daz nie kein mûnch ze hôre sô sêre mê geschrei*.' This self-criticism, which Walther puts in the mouth of one of the objectionable *einer hande diet*, occurs in a *spruch* which Rieger 15 connects with 31, 33.

against ill luck and the devil's seed [but not to the credit of art, or of my poetry] that I should have¹ to sing in this strain, in such a fashion. Whoever² brings courtly song and merriment into discredit, may he be joyless!³ The first three lines are entirely distinct from the rest of the *spruch*, both in idea and in expression. The scoffing invocation is followed by a real invective, thoroughly characteristic of the style and art of the minne-song. In the next verse (5) the tone rises to a dignified protest against these interlopers, as well as to a justification of his own art; and the poem ends with a personal appeal to Duke Leopold. In the translation, I have written (with Wackernagel and Bartsch) *numme dumme* for *nomine domini*, because B gives *dumme*,⁴ and because the verse demands such a contraction in this place (Wilmanns⁵ 180). The proposed reading heightens the sarcasm.

This *spruch* was formerly made much use of, in biographies of Walther, as the first written in this 'tone,' and as a 'Weihestrophe.' The name was bestowed on account of the 'förmliche und ausdrückliche Einweihung' (Rieger 13). Paul (PBB 8, 165-6) has rightly denied that the strophe has any such solemn significance; cf. also Wackernell, Zs. f. d. Ph. 14, 246. But the question still remains whether the first verse is not the *mock*-consecration of what the poet considers an *unhövescher sanc* (31, 36), begun in self-defence. Cf. Wilmanns, Leben 277: 'Mit dem Vortrag von Sprüchen hatte Walther sich über die Schranke gewagt, die bis dahin für den ritterlichen Sänger gegolten hatte.'⁶ Wilmanns⁷ 180 calls the first lines 'komisch gefärbt.' But if only a laugh is to be raised, the cost of it would have to be borne in the end by the poet who debased his muse to travesty. If, on the contrary, while crossing himself with mock piety against the deviltries of his opponents, he takes off their style in bitter sarcasm, the loss is theirs, and his hearers are won.

¹ For this sense of *müene* cf. Iwein 6557 *nû würrht ich aber vil sêre daz ich dise grôz êre vil tiure gelten müene* (lest I should have to pay, etc.)

² For *swer* followed by an imprecation, cf. 11, 14 *swer dir fluoche, st verfluochet mit fluoche volmezzen!*

³ *daz*, introducing a wish, occurs: 52, 18; 64, 34; 95, 2; 100, 18; cf. Iwein 6660 *daz ims doch got niht lône, der daz sô vlîezelichen tete!*

⁴ Cf. 'the land of Nummerdumen amen, that lies on the other side of Monday.' Uhland, III 228

⁵ Cf. Menzel 159.

108, 6.

This strophe, which Lachmann printed among Walther's poems, as 'not unworthy of him,' was reclaimed by Wackernagel-Rieger (xv) for Ulrich von Singenberg; and later editors have followed them (Wilmanns² 368). In Ulrich's poems it has usually found a place after 72-75 A (WR 246; Bartsch, Schweiz. Minnes. 43), which are in the same 'tone'; but no close connection between them has been noticed. Bartsch (xxxviii) says: 'ganz passend ist an dieses Lied [72-75 A] die in gleichem Tone gedichtete Trauerstrophe um Walthers Hingang angereicht.' But a comparison with Walther shows that the strophe in question is modelled after 100, 24-101, 22, and also that it formed in all probability the last verse of Ulrich's song (72-75 A).

Walther 100, 24 *frô Welt*. Wackernagel-Rieger 245, 25 *min vrô Welt*. W 101, 5 (cf. 117, 8) *frô Welt, ich hân ze vil gesogen: ich wil entwonnen, des ist zit. din zart hât mich vil nâch betrogen, wand er vil sœzer frœiden git*. WR 245, 6 *dêst ir site, der ich sô holdez herze trage, daz si sô sœzer sœze wenet, daz man sich næte nâch der lieben liebe senet. waz diu werde minneclicher minne (frœide C) git dem, der, etc.* W 101, 3 *sô dû mir rehte widersagest, sô wirst dû niemer wol gemuot*. WR 245, 13 *wie kunde ich werden hôhgemuot âne ir trôst*. W 100, 35 *gedenk waz ich dir êren bôt, waz ich dir dines willen lie, als dû mich dicke sêre bâte*. WR 245, 21 *dem tuot si liep und êre schîn . . . swen si mit willen frœide wert, dem git si frœiden swaz er ir zer welte gert*. W 101, 9 *do ich dich gesach reht under ougen* (cf. 75, 3), *dô was din schowen wunderlîch . . . al sunder lougen*. WR 245, 19 *er muoz lachen, swer ir under ougen siht*. This suggests for the lacuna after *wunderlîch* a phrase like *des muost ich lachen*, in place of Lachmann's *des muoz ich jehen*. Cf. MSH 2, 332 *dem argen under ougen daz gelücke suoze lachet*. W 101, 21 *got gebe dir, frowe, guote naht: ich wil ze herberge varn*. WR 246, 7 *uns ist unsers sanges meister an die vart, den man ê von der Vogelweide nande, diu uns nâch im allen ist vil unverspart. waz frumt nû swaz er ê der welte erkande?* The moralizing tone in this last is characteristic of Ulrich's attitude towards Walther's poetry. It occurs again in his adaptation (WR 211, 9) of Walther's *spruch* 28, 1.

HENRY WOOD.

THE CONSTRUCTION OF ΤΥΓΧΑΝΩ.

In my Justin Martyr, Apol. I 12 (1877), I said touching *λανθάνω*, *τυγχάνω* and *φθάνω*, 'The typical construction is identity of tenses so far as continuance, attainment and completion are concerned, but the rule is not closely observed except with *φθάνω*.' How closely it was observed with *φθάνω*, how strong the mechanical tradition was, I had long known. So in later Greek we find the rule observed in the rare perf. and pluperf., e. g. Plut. Galba 17: *ἐφθάκει προειληφώς*, Arr. An. 3, 20, 2: *ἐφθάκει παρεληλυθώς*, Luc. Philops. 6 (3, 34 R): *ἐφθάκει προεξεληλυθώς*. In (Dem.) 18, 39: *οὐδὲν προτερήσετε ἔξω τοῦ ἐφθακέναι ἀδικούντες*, there is no real violation of the rule, for *ἀδικῶ* is a familiar equivalent of the perfect. The observations of Weiske, Jahrb. 1884, p. 826, only confirmed the rule, which I did not hammer out into all its details. On any reasonable system of the tenses we must recognize an aoristic use of the present, an aoristic use of the future. The perfect is often a practical present, the pluperfect a practical imperfect and *vice versa*, and the aorist is often the shorthand of the perfect, and sometimes must be (A. J. P. IV 429 note). But, as a real present is needed in Thuc. 3, 83, 3, I change *φθάσωσι* into *φθάνωσι* and read without hesitation *μὴ φθάνωσι προεπιβουλευόμενοι*. Δ 451: *φθῇ σε τέλος θανάτοιο κινήμενον* is no exception, for *κ.* has a distinctly aoristic meaning, and as to λ 58: *ἔφθης πρὸς ἰών*, where Bekker with his fine sense reads *έών*, something might be said about the metre, something about the colorlessness of the participles. If a present participle follows an aorist participle after an aorist, as in N 815: *ἦ κε πολὺ φθαίη . . . πόλις ὑμῇ . . . ἀλοῦσά τε περθομένη τε*, no sober investigator will count the present as a real example of a violated rule. So we find *πρὶν ἄγειν* (A 98), but only after *δόμεναι* (see A. J. P. II 467 and III 516). *φθάνω*, I repeat, is very steady.

Next comes *λανθάνω*. But whoever studies *λανθάνω* will have to consider the negative element, for a negatived aor. of *λανθάνω* may well be treated as an imperfect, and the participle in that case becomes present. See my note on Pind. O. 6, 36: *οὐκ ἔλαθε κλέπτουσα*. Of this negatived aorist of *λανθάνω* with present participle Ebeling will furnish examples for Homer, Ast for Plato. The famous *λάθε βίωσας* shows that the type of coincidence is strong in *λανθάνω* and is not lightly violated.

That is not true of the tricky *τυγχάνω*, and we have to thank Professor J. R. Wheeler for his elaborate statistics of the 'Participial Con-

struction with *τυγχάνειν* and *κυρεῖν* in the new volume of the Harvard Studies (Boston, Ginn & Co., 1891), which, at least, enable us to see how tricky *τυγχάνω* is. In this article Professor Wheeler has arranged these participial constructions under no less than seventeen categories, in which he has followed the form simply and not the meaning, *εἰδώς* being reckoned as a perfect and *ῥκων* as a present. If we apply the principles laid down above, these categories will shrink very much in number, but there will still remain phenomena enough for the grammarian to take to heart. The most striking fact is the very large number of the abnormal class δ' in which the aorist of the finite verb is combined with the present participle. There are, according to Professor Wheeler's count, 171 of these against 66 of the 'normal' construction—the aorist of the finite verb with the aorist of the participle. 'As a matter of fact,' he says, 'the examples do not show here that the distinction between imperf. and aorist was very distinctly observed,' and we are referred to the remarks in §§56 and 57 of the 'Moods and Tenses' for an adequate explanation of the looseness in the use of the tenses. But in these sections I see nothing more than the waiving of a peculiarly inconvenient responsibility; and that we cannot afford to waive this peculiarly inconvenient responsibility is shown by the example of such a veteran as Blass, who has resolutely gone to work on this very problem of the use of imperfect and aorist (see A. J. P. XI 107). Instead of contenting himself with the indifference of imperf. and aor. in the case of *τυγχάνω*, it would have been more to the point, if Professor Wheeler had asked what makes *φθάνω* and *τυγχάνω* to differ in this respect—for they most assuredly differ, as we have seen. But, though I cannot agree with the easy doctrine of the 'Moods and Tenses' in this point, it will not be expected that I should go through all the examples of this indifference as to imperfect and aorist, and I will merely say that the specimen which Professor Wheeler has himself selected does not seem to me very apt. He bids us compare Xen. Anab. 1, 5, 8: *ὅπου ἔτυχεν ἕκαστος ἐστηκώς* with 4, 8, 26: *οὐπερ ἐστηκότες ἐτύγγανον*. Does position mean nothing? Does the individuality of *ἕκαστος* mean nothing? But I am willing to accept all his abnormalities. Rectification here and rectification there will not right such a mass as he has collected, and we must seek for another explanation, and that is not to be found in the indifference of imperfect and aorist. We must go deeper and ask ourselves whether after all our categories are right, whether there

is any necessary association of the three verbs so commonly treated together. A little reflection will show that even theoretically the actions of *τυγχάνω* and its participle are not so necessarily coincident as is the case with *φθάνω* and its participle, with *λανθάνω* and its participle. In *φθάνω* the actions must coincide; neither, to use a homely phrase, can get through the door before the other. In *λανθάνω* we have the negative and the positive sides of one and the same action. But this is not true of *τυγχάνω*, and the language seems to say that it is not true. With *φθάνω* and *λανθάνω* the finite verb and the participle may be reversed. We have from the beginning *φθάμενος* with the finite verb, from the beginning *λαθών* with the finite verb. *τυχών* used in this sense is extremely rare (Kühner, §482, Anm. 14), though in the sense of 'hitting' it is not uncommon in Homer, e. g. N 371: *βάλεν ὕψι βιβάντα τυχών*. The familiar *τυγχάνω* construction with the participle is cited only § 334, τ 291: *τύχησε γὰρ ἐρχομένη νηὺς*, and there is no coincidence. In the one Pindaric example, N. 1, 49, we have the same lack of coincidence: *ᾠσαι τύχον Ἀλκμήνας ἀρήγοισαι λέχει*, a fact which weighs heavily in view of the Homeric habits of the other two verbs. It may be, then, that we have in the constructions of *τυγχάνω* a mere analogy to the typical constructions of *φθάνω*, with which verb *τυγχάνω* has some affinity of sense. If this is so, there ought to be no trouble about the aorist of *τυγχάνω* with the present participle, which would represent the evolution of the *τύχη*, any more than there would be about the combination of the adverbial *τυχόν* with an imperfect, rare as that is. In Latin *accidit ut* with the imperf. is the invariable rule, and the conception is similar (see my L. G. §513, R. 2); and the behavior of *συνέβη* is not un instructive. There the aorist inf. is typical, but the present is also found.

If this theory is correct, then we need not concern ourselves much about the other irregularities which Professor Wheeler undertakes to explain at length, and for the sake of which his article was written. When we have a present indicative or an imperfect indicative with the aorist participle we must have, Professor Wheeler thinks, a real priority of the participle, and this has passed, with due credit to Professor Wheeler, into the revised edition of the 'Moods and Tenses' as one of the new features of that monumental work (§146). But an inspection of the examples given reduces the number considerably. A large proportion of them—there are not many in all—are historical presents, and whatever theoretical shift the historical present may admit from

aorist to imperfect, the aorist participle shows what the Greek conception was in any particular case. One of the examples is not really a participle at all. Dem. 52, 9: ὁ Λύκων τυγχάνει ὢν καὶ ἄπαις καὶ κληρονόμον οὐδένα καταλιπών, where the position and the double καί show that κληρονόμον οὐδένα καταλιπών is virtually an adjective, there being no negative adj. of the kind in classical Greek. Add this to Alexander's examples, A. J. P. IV 306. In Isocr. 4, 103 τυγχάνουσι is generic and so may be aoristic. Under the imperfects Professor Wheeler cites Hdt. 6, 65: οἱ τότε ἐτύγγανον πάρεδροί τε ἔόντες καὶ ἀκούσαντες ταῦτα Ἀρίστωνος, the present comes first and it is not fair to count the example. And in some of the others the aorist participle is a shorthand perfect. But I am not trying to save the formula of τυγχάνω. Quite the contrary. My only object is to show that mere statistics will not solve problems, though such statistics as Professor Wheeler's are extremely serviceable in emphasizing the necessity of a thorough revision of an important chapter of Greek syntax, the temporal uses of the participle.

B. L. G.

REVIEWS AND BOOK NOTICES.

The Fravashis by Aerpat MEHERJIBHAI PALANJI MADAN, to be read before the eighth International Oriental Congress. Bombay, printed at the "Times of India" Steam Press, 1889.

The author of this little treatise, who translated de Harlez's French version of the Avesta into Gujarati, and is just about to give to his countrymen a Gujarati version of Dr. Mills's translation of the Gâthâs, tries a new explanation of the nature of the Genii called Fravashis whose name so frequently occurs in the Avesta. Relying especially on Yasna LIV 1 and XXVI 11, 21 (ed. Spiegel), he endeavors to prove that "*urvan* (the soul) is the progenitor of good or evil actions or things. Now the good actions that result from *urvan* are its Fravashi, which literally means protector. *Urvan* is protected from punishment and gets due rewards through its Fravashi or good actions" (page 6). The Fravashi of Ahuramazda, accordingly, is all his good creation. "People love him, venerate him, worship him for his creation and noble gifts, his Fravashi" (page 7). This is acceptable, but how can we explain the Fravashis of inanimate things, as earth, water, trees, etc., which have neither *baodhang* (intelligence) nor *urvan* (soul)? According to the author's opinion the explanation is simple: "The force or generative power in these inanimate things, which produces something useful or good, may be taken as *baodhang* and *urvan* combined; what they produce is their Fravashi. The earth, for instance, gives us habitation and produces all sorts of things, such as trees, plants, minerals, etc., for our use or profit. Thus the habitation, trees, plants are the Fravashi of the earth. Similarly, trees and plants produce fruits, food and healing medicines, which are the Fravashis of trees and plants. Water quenches our thirst, increases our health, and makes our food digestible. These properties in water, that are thus useful to us, are its Fravashi. The Fravashis of these inanimate objects support or protect them, which means that people take care of them on account of the good they derive from them" (pp. 7, 8). This explanation seems to me rather far-fetched. It is strange that the Fravashis are to be nothing more than the good actions of man, which are designated in the Avesta by *hvarshata*, a word which occurs in the formula *Humata, Hukhta* and *Hvarshata*, or good thoughts, good words and good deeds, a formula that contains the fundamental principle of Zoroastrian religion. And how can we presume that there are Fravashis, viz. good works of men who are not yet born? A passage in the hymn Yasna XXVI 6 runs as follows: "We worship the holy Fravashis of the deceased good men, of the living good men, and of those who are not yet born."

I will try to give my own opinion about the Fravashis. In two passages of the Avesta (Yasna LV 1, LXIII 3) the Fravashis are conceived as a part of the human soul, intermediary between soul and body, being nevertheless an independent

personality, especially independent of the body. According to the more recent tradition, the Sadder-Bundeesh (see Spiegel's introduction to the traditional books of the Parsees, II 172, 173), when the body is given up to annihilation the remaining powers of the soul leave it, conscience goes straight to heaven, but the soul, consciousness and Fravashi remain together, to account for the actions of man and to be rewarded or punished. The Fravashis, we see, belong to the immortal parts of the soul, whose destiny they share to its ultimate fate on the day of judgment. But the existence of the Fravashis is not entirely included by that of the soul. They have already existed before, from the time when the spiritual world was created, and they are immortal like every creation of the good spirit Ahuramazda. They are the divine part of man, which, existing from all eternity, is only for a short time connected with the human body.

We see that, besides the Fravashis who stay on earth, according to the Avesta, there are others who dwell in heaven and will descend to earth in future times; and others who have returned already to heaven from their earthly life as souls of good men. These three are often invoked together, for example, in the above-quoted hymn, Yasna XXVI 6.

Every living creature has its tutelary spirit, not only in this, but also in the spiritual world. Even Ahuramazda, the creator and master of the world, forms no exception, and his Fravashi is mentioned as often as the Fravashis of the Ameshaspentas, who are assembled around the throne of Athuramazda, and the Fravashis of the other beings who are worthy of sacrifice (cf. Ys. 23, 2; Yt. 13, 82). So, in the Vendidad, XIX 14, Zarathustra is bidden invoke the genius of Ahuramazda, *whose holy law is the principle of life*, and in another passage (Yt. 13, 80) he is mentioned in the following terms: "*we worship the genius of Ahuramazda, whose soul is the Holy Word.*" We find the Romans worshipping in a similar way the genius of Jupiter and the Dii geniales. But the Fravashis of the good men who lived before Zarathustra and his preaching of the law, were invoked most frequently, and generally together with them the Fravashis of the nearest relations of the invoker and the genius of his own soul (Ys. 1, 18; 22, 27; 23, 4; Yt. 13, 149), by which the Persian used to swear like the Roman. The Fravashis of these good men and those of the yet unborn are called more powerful than those of the living, and more powerful than those of the dead (cf. Yt. 13, 17; Ys. 26, 6). This also reminds us of the Roman cult of genii, in which the ancestors of the house, the Lares, were separated from the tutelary genii of single persons, and of Iran, where the cults of the *Lares*, *Manes* and *heroes* were blended. The Fravashis were worshipped as the ancestors of the family and tribe, giving help and protection to their family and race (cf. Ys. 26, 1; Yt. 13, 149-151; Ys. 23, 4; 26, 6, 7, 9). The antiquity of this creed is proved by its occurrence in the oldest remnants of Hindu literature. According to the belief of the ancient Hindus, the souls of the dead, the ancestors, are dwelling in heaven as associates of the gods, and by this intercourse are acquiring the wondrous powers ascribed to them by the R̥g-Veda (cf. RV. I 164, 30; X 15, 2-6; X 16, 11; X 154, 3-4; VI 75, 9, 10), where it is said that they have adorned the sky with stars, given darkness to the night and light to the day, that they have found the hidden light and created the morning-red (see RV. VII 76, 4; X 68, 11, X 154, 5; Çat. Brāhm. VI, 5,

4, 8; I 9, 3, 10). It was with gifts and powers like these that the piety and devotion of men wanted to see the piety of their ancestors recompensed.

In the Avesta the Fravashis are associates and assistants of Ahuramazda, who by their splendor and majesty protects the earth, but they stand in the closest relation to man, to whom they are given as friends and protectors (Yt. XIII 9-12, 15-16), and for whose bodily welfare they take care by the wise distribution of earthly goods (Yt. XIII 18, 22-24, 27, 30, 40-42, 51-55), and by preventing all the dangers and miseries occasioned by evil spirits (Yt. XIII 20, 33, 48, 70-72, 78, 131, 136-138). Therefore the countryman invokes them when the fruits of his field seem to be destroyed by want of rain (Yt. XIII 66, 68); kings and commanders ask for their help in the turmoil of the battle (Yt. XIII 17, 30, 31, 34, 37-38, 66-67). They are the protectors, they are the weapons and the support of those who call upon them (Yt. XIII 69-72). But they do not only aim at the bodily welfare of those whom they support, they are chiefly anxious to defend the souls from threatening dangers, and so in the prayers addressed to them they are praised for awakening pure thoughts and inclinations in the soul to whom they are giving the right and salutary nourishment it requires (Yt. XIII 25, 30, 36, 42, 88-94). When man is dead his protecting spirit approaches the throne of Ahuramazda as a mediator (see Minokhired II 3 following; Aogemadaëca ed. Geiger, 8-11; Yt. XXII). This belief of the Iranians in this influence of the Fravashis enables us to understand that, as powerful assistants of the divinity, they were deemed worthy of the highest worship, that a peculiar cult was consecrated to them, praise and honor given, and that sacrifices were offered to them as to the divinity. According to the precepts of Zarathustra it is highly important to worship the Fravashis in the right way (Yt. XIII 21 following, 49-52, 73), as their power and agency are depending on the offerings.

I believe that the cult of the Fravashis dates from a very early time, when the Aryans were not yet separated into different nations. True, traces of these cults may be found with all the nations of the Indo-European family, but nowhere was it so peculiarly developed as with the Persians and the Romans.

EUGEN WILHELM.

JENA, November 24, 1890.

Dr. ADOLF WAHRMUND, Professor: Praktisches Handbuch der neupersischen Sprache. I Teil: praktische Grammatik. II Teil: Gespräche und Wörtersammlung. III Teil: Schlüssel zur praktischen Grammatik. Giessen: Ricker, 1889.

MUHÄMMÆD (Gæfær Qaragadāgī), *Monsieur Jourdain*, der Pariser Botaniker, im Qarabāg. Persischer Text mit wörtlicher deutscher Übersetzung, Anmerkungen und vollständigem Wörterverzeichnis, zum Gebrauche der K. K. öffentlichen Lehranstalt für orientalische Sprachen, herausgegeben von Dr. ADOLF WAHRMUND, Professor. Wien, 1889, Hölder. (viii, 34 u. 30 S. 8.)

Wahrmund's manual of the Neo-Persian language, which fourteen years after its first appearance comes out in a second and very well printed edition, is originally intended for the use of Oriental seminaries, but will be useful to everybody who wants to obtain a practical knowledge of Neo-Persian. The

first part (pp. 1-156) comprises grammar, which firstly treats systematically of the nouns, verbs, particles, as well as of the composition of words, and pays due attention to the Arabic nouns, pronouns, verbs, adverbs, prepositions, conjunctions, interjections occurring in Persian, and to the composition of Arabic words, and secondly gives practical exercises for making the student acquainted with inflections, furthermore a short outline of syntax and instructions for reading Persian verse. As for grammatical forms the author restricts himself to the condition of the language since the time of Firdausi. The practical exercises, of course, are taken from the Persian of the day, the examples for written language are borrowed from Firdausi's *Shāhnāme*, Sa'di's *Gulistān* and *Būstān*, Gāmi's *Baharistān*, 'Attār's *Pandnāme*, Hāfiz and *Mirchond*.

The second volume contains conversations and a carefully adapted collection of the words most required in conversation. The reading exercises which follow the lessons are taken from Sa'di's *Gulistān* and *Būstān*. Newly added in the second edition are nine pages from Persian newspapers of the day, p. e. from the journals "*Farhang* (Advertiser) of Isfahān," "*Ahtar*" (the Star), and "*Qafqāz*" (Caucasus), the latter printed and edited at Tiflis.

The third part, the key, gives the Persian version of the German translation-exercises, the German translation of the reading exercises with remarks, transcription and metrical scansion of the poetical passages.

The undersigned, who instructed students by help of the first edition of this practical hand-book (not only those wishing to acquire a practical knowledge of Neo-Persian, but also those who desire to make an earnest scientific study of the Neo-Persian language and literature), may with entire conviction sum up his opinion as follows: the chief merit of Wahrmund's book in comparison with other books of the kind consists in the happy connection of theory and practice, in the clear systematical construction of grammar, together with practical exercises, in the consistent carrying through of the clearly conceived purpose to make the student really able to speak and write Persian.

For further studies of modern Persian conversation we refer to Wahrmund's edition of the comedy "*Monsieur Jourdain*," translated into Persian from the Turkish original by Mirzā Ġa'far. Mirzā Fath 'Alī Ākhondzāde, a Tatar officer, of Caucasian origin (see *Journal Asiatique*, 1886, Vol. VII, p. 6), composed six Turkish plays in the dialect of Adarbāijān for the theatre at Tiflis, built in 1850. These were afterwards translated into Persian by Mirzā Muhammed Ġa'far Qarāğadāgi, lithographically published at Teherān in one volume, and known in Europe only in this way. The Persian translator wished to interest his countrymen in drama and theatre in European style, and at the same time believed his plays peculiarly fit for an easy agreeable entertainment of his own people and an excellent means of making Turks and all foreigners acquainted with the modern Persian conversation of every-day life.

One of these plays was published in English translation in Europe with the title: "*The Vazir of Lankurān*," a Persian play: a text-book of modern colloquial Persian for the use of European travellers, residents in Persia and students in India: edited with a grammatical introduction, copious notes and a vocabulary, giving the pronunciation of all the words, by W. H. D. Haggard and G. Le Strange, London, 1882.

Imitating this model, but in a more concise form and at a much cheaper

price, Professor Wahrmund edited for students and amateurs of Persian the comedy in question. The subject is attractive by sound humor, and the modern Persian the play is written in suggests of itself comparisons with the more ancient stock of the language by the peculiar terms and by new formations. In this respect we will only point out how much the number of the prepositions taken from the sphere of the nouns has increased in Neo-Persian, a fact which also may be traced in written modern German, especially in the official and law style. Very interesting is the list of about 36 new formations and significations of words which are still missing in the dictionaries. The book, therefore, may be well recommended to every friend of Persian literature, and connoisseurs as well as the less expert will read it with pleasure and advantage. We hope that the editor may soon be able to publish companion editions of other plays.

JENA, December 7, 1890.

EUGEN WILHELM.

T. Macci Plauti Rudens, edited, with critical and explanatory notes, by EDWARD A. SONNENSCHNEIN, M. A. Oxford, Clarendon Press, 1891.

This is a good edition of a good play, in every way suited for use with advanced classes. The introduction discusses the relation of the play to the *Vidularia*, which had a similar subject, explains sufficiently the peculiar stage-setting of the Rudens, and gives a brief account of the MSS. Information in regard to the action of the play (especially important because there are so few commentaries on the Rudens) is given by a table of entrances and exits, and by summaries in the notes, a better arrangement of the material than that in Brix and Lorenz.

In the text the headings of scenes are given as in the Bembine MS of Terence—a slight but praiseworthy innovation in editions of Plautus. Another innovation is the disregard of Spengel's division into acts; it is not an important matter, but the five-fold grouping of *cantica* and *diuerbia*, though it is not precisely a division into acts, deserves mention either in the text or in the introduction.

The text is sound and trustworthy, the best we have of the Rudens. It contains about 50 conjectures by O. Seyffert and some 20 by the editor; of the latter I should think 191, 321, 579, 766 sure; 253 also is good, but in 1152 the sense seems to demand *te* rather than *tuom*, and *faxere*, 376, is not found, I believe, in Pl. The method of the editor in emendation is thoroughly sound, and is in strong contrast to some attempts to restore the text of Pl. by introducing rare words.

The notes are largely upon the language, and meet fairly well the end which the editor had in mind, to "serve the purpose of a general introduction to the peculiarities of Plautine idiom" (Pref. ix). Errors or slips are extremely rare. Periphrastic forms occur also in direct questions (1419, cf. on 467); *nam* is not properly "interrogative" (687), but only associated with interrogative words; "*quod* = *quoad*" (287) might be misunderstood, and the statement in regard to *en* (p. 189, n.) seems to overlook *en unquam*. The excursus on interjections contains nothing that is not in Richter, Studemund's Studien, I 2, but the notes on conditions, on sequence of tenses, on the fut. indic., and on the subjunctive are real contributions to the syntax of Plautus. As a whole, the

commentary shows how much better work is done by an editor who is thoroughly familiar with his author than by one who takes up a play merely to edit it.

I venture to make two criticisms or suggestions: First, there are too many short notes like (243) "*cedo*, 'give me' (origin uncertain)"; (245) "*ut*, exclamatory"; (264) "*ire*, 'come,'" and 513, 548-553, etc. Second, notes like those on 138 and 611, on 342, 358, 207, 510, which consist of three or four references to parallel passages, are, even when the list of passages is fairly complete, rather materials for notes than actual notes. But I am aware that an editor has not unlimited space at his command.

E. P. MORRIS.

A Finnish Grammar, by C. N. E. ELIOT. Oxford, 1890.

Finnish and Hungarian are the two most important members of the Ugrian branch of the extensive Ural-Altaic family of languages. A Finnish grammar in English really marks a new epoch in the study of this important philological domain, as investigations have hitherto been confined almost exclusively to Russian, Swedish and Hungarian scholars.

The study of the Altaic group is especially interesting in view of its supposed connection with the non-Semitic language of the cuneiform inscriptions, the so-called Sumero-Akkadian. Various distinguished scholars have endeavored to establish an affinity; Lenormant, for example, fancied that he saw a resemblance between Sumero-Akkadian and the Ugro-Finnic family, even going so far as to draw a comparison between the great Finnish epic, *Kalevala*, and the Sumerian mythology; but this hypothesis was ably refuted by Dr. Donner in his Appendix to Haupt's "*Akkadische Sprache*," 1881. Hommel's attempt to identify Akkadian as a branch of the Turco-Tartaric group is, in spite of his confident tone, lacking in sober judgment. The immense difference in point of time between Akkadian and the modern Altaic languages must necessarily increase the difficulty of an accurate comparison, especially as we cannot know what changes the Altaic idioms may have undergone during that period.

Mr. Eliot certainly deserves the credit of having opened up an unexplored field to English-speaking philologists, as his work is, as far as I know, the only grammar of Finnish in our language.

In his introduction, pp. ix-xlvi, he gives a treatise on the language in general, taking up in order its chief peculiarities, such as vowel harmony, vocalic differentiation, etc., concluding with a few pages on the relation of Finnish to the cognate dialects, Turkish, Magyar and the Siberian idioms.

Mr. Bain, in his review of this work in the Academy, January 10th, 1891, quite rightly takes exception to the author's philology, in seeing resemblances between the Finnish and Latin declensions, and in considering that the language presents no great differences from the Aryan family. While it is undoubtedly wrong to consider Finnish as anything but a well-marked agglutinative type, still it is interesting to note that there exists in these dialects a decided tendency to true inflection, so much so as to obscure in certain endings the distinctive differences between inflection and agglutination. In other words, Finnish and Magyar have advanced considerably from the primitive monosyllabic type, but have by no means reached the inflectional stage.

Mr. Eliot, in his remarks on accent, p. xiii, has not stated the case as accurately as one could wish. He admits the rule of invariable accentuation of the first syllable, but states that his ear is inclined in many words to place the voice-stress on the ultimate, especially when it is long; for example, in the word *revitään* he considers the accent to be on the last syllable. The probability is that this long final syllable has a secondary accent, the chief tone resting on the first syllable, and as the difference between main and secondary accent is in all likelihood not strongly marked, and extremely difficult to be distinguished by a foreigner, the author is scarcely justified in doubting the truth of the regular rule.

In the grammatical statements, not only are the sections on the infinitives, which are considered the main difficulty of Finnish, especially lucid, but the paragraphs devoted to the use of the cases, of which the language has fifteen, are extremely clear and exhaustive.

In the chrestomathy the selections from *Kalevala* give an excellent idea of the general style and swing of the lines. The explanatory and grammatical foot-notes are very full, but it would be more convenient for reference if a small glossary had been appended.

An English version of *Kalevala*, by Mr. Crawford, appeared in New York in 1881, and the style of the epic has been made familiar by Longfellow's *Hiawatha*.

As Mr. Eliot's work does not pretend to be a comparative philological treatise it cannot be judged from this point of view; but regarding it as a whole, it must be admitted that the author has certainly succeeded in placing before the public a clear and concise handbook of the Finnish language.

J. DYNELEY PRINCE.

English Prose: its Elements, History, and Usage. By JOHN EARLE, M. A., Rawlinsonian Professor of Anglo-Saxon in the University of Oxford. New York, G. P. Putnam's Sons. London, Smith, Elder & Co., 1891 (pp. x, 530).

The history and development of English prose is a subject that has been heretofore greatly neglected. We have had works on the history of the English language, and numerous works, more or less valuable, on composition and rhetoric, devoted to a statement of what is conceived to be correct modern usage. But a critical study of English prose from the earliest times, directed to an analysis of its elements and their historical development, and an effort to ascertain how modern usage has come to be what it is, has heretofore been wanting, so that Prof. Earle is right in stating that, "whereas our poetry has called forth a succession of critical literature from the times of Elizabeth until now, no like attention has been paid to English prose"; and in claiming that "the present work is quite new, not merely in details and in treatment, but in its very conception." The importance of the work and its correct appreciation of the place of English philology in the study of English prose, justify a notice in this Journal.

The general plan of the work may be given in Professor Earle's own words: "First, there are four chapters in which the subject is treated analytically; then five chapters in which the treatment is synthetic, and progressively so,

from divided aspects of diction in chapters V and VI, down to the comprehensive effect of style in chapter IX. Thus far it might be called two books, analytic and synthetic. A third book traces the historical career of English prose, following the three great eras of its development, whence this book naturally falls into three chapters, X, XI, and XII. To these three books are [?] appended a closing chapter of observations calculated to promote the culture and practice of what has been called the Art of the Nineteenth Century."

Prof. Earle laments that "much [*sc.* time] is spent by English people, and not without good reason, on elementary acquirements in the ancient languages of Greek and Latin, and on the modern languages, especially French, German, and Italian, but their life-long medium of communication is English, and the study of this is comparatively neglected." While this reproach is gradually being removed, in this country at least, a critical work like the present was greatly-needed that the general public may gain a clearer idea of the elements, history, and usage of English prose.

The subjects of the several chapters are briefly as follows: Choice of expression; the import of grammar; some mechanical appliances, i. e. punctuation marks, etc.; bearings of philology; the leading characteristics of prose diction; of idiom; of euphony; style; history of English prose to the first, second, and third culminations respectively; and finally, the pen of a ready writer.

These titles will give the reader an idea of the comprehensive nature of the work and of the combination of analysis, synthesis, and history in the treatment of English prose. The contents of the chapters require a closer examination. Under "choice of expression" we have an analysis of the English vocabulary into its component parts, native English, Norman French, and Classical, and a table given, occupying some thirty pages, of correspondent Saxon, Romanic, and Latin words, although sometimes the words appear in but two of these columns; it is not claimed that the words are exact equivalents of each other, but they are germane to the same matter and may often be used in alternative forms of expression. A short table, two pages, follows of Romanic and Latin words illustrating the choice between older and later forms, often from the same original root. These tables and the judicious remarks upon them, illustrate well the choice of expression at the service of the writer, and the importance of a thorough mastery of the English vocabulary. Prof. Earle notes with interest that "there has been in our day a very marked return towards 'Saxon English,' that is, towards the elder elements of English," and he charges the young writer "never to allow himself to use an unauthorized word."

Under "import of grammar" we have an account of the parts of speech distinguished as *Presentives* and *Symbolics*, a distinction familiar to those acquainted with Prof. Earle's "Philology of the English Tongue"; a consideration of phrases, clauses, and sentences, the last divided into simplex, composita, and evoluta; the structure of the paragraph, which Prof. Earle regards as "the triumph of the modern art in writing"; and some remarks on the logical analysis of sentences. Here we may thank the author for emphasizing the distinction between the verbal noun and the flexional infinitive in *-ing*, a distinction often overlooked by grammarians, and he would have done well to

caution the reader against the more elementary blunder, not, however, unknown to teachers of English, of confounding the participle in *-ing* with either of the above-mentioned forms. Lack of space will not permit illustrations.

The chapter on "some mechanical appliances" need not detain us, as it is merely a brief consideration of the ordinary punctuation-marks and other signs, and of their value to the writer, hence not too elementary for inclusion in this work. The following chapter on the "bearings of philology" is of more importance. The author thinks that "the claim to be independent of science, which has been put forward by some of those who speak in the name of literature, is a claim that cannot be admitted"; that the aversion shown to philology by those who take English literature for their province "is quite natural under the circumstances, and it is only part of the ordeal which every new science has to pass through," geology, for example; but that in this enlightened age it is remarkable that a writer, name not given, should use such language as the following: "Besides, in these days of ours, every one who cares for literature should resist the ambitious and mischievous encroachments of philology upon the domain of letters. It is clear that philology is not literature, because many excellent writers have been quite innocent of that, and of all other science; while the most learned philologists, like most other men of science, usually write an execrable style." Prof. Earle rightly makes merry with such a specimen of logical acumen on the part of the anti-philologist.

Philology is briefly considered in its four branches of phonetics, form-lore, etymology, and semantology, a term borrowed from the French, the tracing of the meanings of words, on which ground the author hopes "to conciliate the belletristic literary man," for "it really is not scientific enough to offend anybody." Grimm's law is duly stated, with illustrations from Greek, Latin, and English, but the High German step is omitted. Verner's law is also stated in the form: "Where Grimm's law might hold good under a normal placement of the accent, it fails to hold if the accent is displaced," true enough as far as it goes, but I think that one previously unacquainted with the law would not be much enlightened by this brief statement. A list of the strong verbs in English is given, with some archaic forms lost in modern English, but I should question the correctness of inserting *dread* and *hide* in this list on the ground of the mediaeval forms *drad*, *ydrad*, which are derived from the weak forms, and of the past participle *hidden*, which is a later formation. Prof. Earle adopts (p. 122 *et al.*) the form *redd* as the past participle of *read*, which will do very well even without the additional *d*, if the language will take it up, for there is no reason but inconsistent usage why we should say *lead*, *led*, *led*, and not *read*, *red*, *red*. But I shall not quarrel with such an ardent advocate of the study of philology by the writer of English.

The five chapters following are rhetorical in their character. "The leading characteristics of prose diction" are treated under the several heads of elevation, lucidity, variety, novelty, and figure, these rhetorical attributes of style being illustrated by numerous examples, which method is one of the chief excellences of the work. Every writer must agree with Prof. Earle in his desire to save the subjunctive mood, as contributing to both elevation and

lucidity of style. The matter is considered of such importance that, after mentioning it on p. 172, he recurs to it on p. 199. He says (p. 172): "Some people seem to think that the subjunctive mood is as good as lost, that it is doomed, and that its retention is hopeless. If its function were generally appreciated, it might even now be saved"; and "if we lose the subjunctive verb it will certainly be a grievous impoverishment to our literary language, were it only for its value in giving variation to diction"; and again (p. 199): "There is a traditional scholastic superstition that to apprehend the subtlety of the subjunctive we must resort to Latin. The fact is, that in its shades of relation the English subjunctive is as fine as the Latin; and when we consider how little the English subjunctive has of external and visible form, the action of mind in the English subjunctive will appear even more delicate than in Latin." O that our grammarians would give heed to these words of wisdom! An unfortunate *erratum* of 'printing' for 'painting' occurs on p. 180, and we might spare 'luxation' (p. 188) and 'refocillate' (p. 509), however justified by the columns of a dictionary, where the latter word is marked 'obsolete.' In respect to new-coining the author recommends to the writer "to make new words out of English material, where mother-wit may serve him, rather than to risk the ticklish construction of new Latin compounds," and he cites the word *pontifacial* as a ludicrous example of newspaper English. Prof. Earle suggests *pontifical*, but Webster gives a quotation from Milton where *pontifical* is used in its literal sense. On p. 220 *dampen* is pronounced to be new, and Mark Twain is cited as authority for it. It is certainly common enough in this country, but we should hesitate to use Prof. Bryce's *quieten*, having long since followed Shakspeare in using the shortened form of the verb. But we may agree with Prof. Earle that "Our elder prose is a mine which remains yet to be explored."

The following chapter "of idiom" is one of great interest, but it must be hurriedly passed over. On the vexed question of "It is I" and "It is me," the author says, "both formulae are in use, but the latter is homely and familiar; the former alone is used in what is called correct writing"; and then he cites Chaucer for "the native English formula," "I am it," but does not Chaucer always say "it am I," from which "it is I" is easily deduced without the intervention of the Latin, even if "it is me" is formed from the analogy of *c'est moi*, which was once *ce suis-je*? "The Harrowing of Hell," 181, dating from 1310, preserves for us the still older form "ich it am," exactly analogous to the oldest English "*ic hit eom*" (cf. on this phrase Alford, Latham, Ellis, Bain, Mason, and Storm). Prof. Earle regards the preposition at the end of the sentence as an adverb, but it must certainly be construed with its case which precedes (even if it is closely connected with the verb), and hence it has a prepositional force, just as in the oldest English. This is a good English idiom, and our modern purists should not be allowed to banish it from English writing. Other matters for consideration suggest themselves, but space is wanting to do justice to them. Prof. Earle closes this chapter with the good advice that "all Englishmen who aspire to be authors should, if possible, write idiomatically"; and to this end they should read books in Old English, and especially become "acquainted with those poets in whose pages the genuine native aroma is stored up, such as Chaucer, Spenser, Shakspeare."

I must pass over the chapters on "euphony" and on "style," and, with particular regret, the three chapters on "the history of English prose" to its culmination respectively in the tenth, fifteenth, and nineteenth centuries, "epochs at which," thinks Prof. Earle, "the language has culminated into a standard—a standard which has retained its literary value for generations and for centuries." This is one of the most interesting and instructive sections of the book, but I have already prolonged this notice to greater length than I intended, and must bring it to a close. Enough has been said to show that this work is a book that cannot be neglected by any student of English prose. It does not follow that every reader will agree with all of Prof. Earle's views, but he should, at least, know what they are, and be able to give his reasons for disagreement. The final chapter contains some practical advice on the art of writing, and amongst much that is good the following sentence may serve as a fitting close to this notice: "The fact is that, next after rudimentary grammar and the perusal of good authors, philology is precisely the study that is required by him who would qualify himself in earnest for the practical art of writing English."

JAMES M. GARNETT.

A Middle-English Dictionary, containing words used by English writers from the twelfth to the fifteenth century. By FRANCIS HENRY STRATMANN. A new edition, re-arranged, revised, and enlarged. By HENRY BRADLEY. Oxford, At the Clarendon Press, 1891 (pp. xxiii, 708).

Stratmann's "Dictionary of the Old-English Language," as it was formerly called, has been before the public for many years, the third edition having been published in 1878, and a supplement issued in 1881. After the death of Dr. Stratmann, in 1884, the copyright of the work was acquired by the Delegates of the Clarendon Press, and they entrusted to Mr. Bradley the preparation of a new edition of the dictionary, for which Dr. Stratmann left considerable materials. The present edition is not, however, a mere reprint of the old work, with the use of Dr. Stratmann's materials. Mr. Bradley has improved the work in several respects, which may be briefly summed up, after his own statements, as follows:

1. An intelligible meaning in Modern English has been supplied to every word, as Dr. S. had in many cases given only the Latin equivalent or the English cognate.
2. The arrangement of words has been greatly improved, having been made strictly alphabetical, and not by prefixes, as in the old book, which sometimes necessitated the looking in three or four places to find a word, unless the student was so well acquainted with the etymology of the word that he knew just where to look.
3. Where a foreign word has come into English by different channels and with different meanings, as from Norman-French and classical Latin, the words have been separated.
4. Words in primitive Teutonic beginning with *hl-*, *hn-*, *hr-*, where the *h* has been dropped in M. E., have been placed under *l*, *n*, and *r* respectively, and the *h* prefixed in italics.
5. A very important and useful change is the notation of the M. E. quantity. This defect in Morris and Skeat's "Specimens of Early English" has

been felt, I presume, by every student who has used those books. The quantity is marked in Sweet's Primers, but the specimens given in them are so brief that they cannot take the place of the fuller works.

6. The diacritic *#* has been used to mark a M. E. *u* descended from O. E. *y*, or a similar sound, and Mr. B. regrets that he has not made further use of diacritics.

7. In the etymologies direct derivation and collateral relationship of words have been distinguished, and some errors of detail rectified.

8. Another important improvement made by Mr. B. is the insertion of many Romance words omitted by Dr. S., who directed his chief attention to the Teutonic portion of the language. Surely the words of Romanic origin should also be included. Mr. B. states, however, that "in the selection of new words for insertion he does not profess to have followed any systematic method." He also says, that "while he has not expunged the proper names inserted by the author himself, he has not added any others." It seems to me that the insertion of proper names is desirable, if not in the body of a dictionary, at least in a special appendix. The student will frequently want information on the subject, and will have to consult some other work, with the chance of not finding what he wants.

The above-mentioned improvements all increase the value of the dictionary, and Mr. B. deserves the thanks of students for them. Testing the list of works referred to in order to see what additions have been made, I find under the letter A alone, thirty-four titles instead of twenty-two in the last edition. Similarly examining a single page (p. 20) under A, I find two Romance words added, *ambler* and *dme*. It is possible that these may be found in Dr. S.'s supplement of 1881, to which I have not access, my edition being the third (1878) without supplement. Examining some of these words for additional references, I find *five* instead of *two* under *alure*, sb. These entries may here be compared to illustrate the difference between the two editions.

Old edition: "*alure*, O. Fr. *alure* (*allure*), Prompt. 10; *alur(e)s* (pl.), Rob. 192."

New edition: "*alure*, sb., O. Fr. *alure*, *aleure*; *place to walk in, passage, gallery*, Alis. 7210; Guy, p. 85; Pr. P. 10: *alur(e)s* (pl.), Rob. 192; *throu the aleris of his soler* '*per cancellos coenaculi sui*,' Wicl. 4 Kings i. 2."

The improvement in the new edition is here manifest. The passage from Wiclif is given in A. V., "through a lattice in his upper chamber," and R. V. merely substitutes 'the' for 'a.'

If we examine *soler*, we find the English meaning added, "*upper chamber, summer room*," and two references from Trevisa, making *seven* for the *five* of the old edition. In both appears "Wicl. Josh. ii. 6," which is in the Vulgate "*in solarium domus suae*," and in A. V., "up to the roof of the house," where R. V. omits "of the house."

The next word to *alure*, *aluten*, illustrates the improvement in arrangement, for here in the old edition we must look back to the list of words under the O. E. prefix *a*, which is distinct from the O. Fr. prefix *a*; and this improvement is still further shown by *amaien*, for which in the old edition we must look, not under the O. Fr. prefix *a*, although there is an O. Fr. form *amaier*, but under O. Fr. *es-* (Lat. *ex*), for O. F. *esmaier* is the older form; here, too, we find *four*

references for *two* in the old edition. Without pursuing this examination further, it is hoped that this is sufficient to show the decided improvements of the present edition made by Mr. Bradley.

The editor prefixes a "Comparative Table of References to Chaucer's *Canterbury Tales*," showing the correspondences of the Chaucer Society's Six-Text edition, which is cited under the words, with Tyrwhitt's, Wright's, Morris's, and Bell and Skeat's editions, so that the possessor of any one of those editions has an easy means of reference to any passage cited. A "List of General Abbreviations and Signs" is also prefixed, and some five pages of "Additions and Corrections" appended. For these the editor makes due apology, and particularly for the errors of the press, but no one who has ever carried a book, or even an article, through the press will criticise these very severely. It is undoubtedly the duty of an editor to exercise all reasonable care against such errors, but when, after repeated re-reading of the proof-sheets, especially such difficult proofs as those of a dictionary, errors will crop out, they must be leniently judged. I am sure that all scholars will be greatly indebted to Mr. Bradley for the labor he has bestowed upon this valuable work. Until the completion of Maetzner's greater dictionary, which, after many years of labor, has reached only the letter J, there is nothing to take its place. It may be confidently commended to all students of Middle-English.

JAMES M. GARNETT.

English Miracle Plays, Moralities and Interludes: Specimens of the Pre-Elizabethan Drama. Edited, with an Introduction, Notes, and Glossary, by ALFRED W. POLLARD, M.A. Oxford, At the Clarendon Press, 1890 (pp. lx, 250).

Mr. Pollard thinks that "the small attention devoted to the pre-Elizabethan drama in all histories of English literature is the best excuse for the appearance of the present volume of Specimens," and he is certainly right. Until the publication of Miss L. T. Smith's edition of the York Plays in 1885, the student was practically without the means of making himself acquainted with these interesting relics of the older English drama, for the old editions of the Chester, Towneley, and Coventry Plays were out of print, and virtually inaccessible to the private student. Here we have in convenient form a small volume with sufficient specimens to enable a student to acquaint himself practically with these plays. Mr. Pollard makes selections from each of the four series above-mentioned, and from eight other plays: Mary Magdalene, The Castell of Perseverance, Everyman, Interlude of the Four Elements, Skelton's Magnyfycence, Heywood's The Pardoner and the Frere, Thersytes, and Bale's King John. The introduction is sufficiently full, beginning with the *Χριστὸς Παῖσχων*, attributed by all previous historians of the drama to the church father of the fourth century, Gregory of Nazianzus, but now denied to him, after the investigations of Dr. J. G. Brambs (1885), and assigned to the tenth century. The contemporary Latin plays, after Terence, of Hroswitha, the nun of Gandersheim, are duly noticed, but set aside as "exotics," "having nothing to do with the services of the Church."

The Miracle Plays, however, had their origin in the representations of scenes from the life of our Lord, made at the Easter services some time during the

thirteenth century, and an Orleans MS of that date contains ten of these Latin plays, although Mr. Pollard thinks that "its contents were probably composed before the year 1200, and may thus be reckoned as contemporaneous with those of Hilarius." This Hilarius, supposed to be an Englishman, was a pupil of Abelard, and has left us three Latin plays, one on the history of Daniel, another on the Raising of Lazarus, and a third on Saint Nicholas. Matthew Paris refers to the performance of a miracle play in honor of St. Katherine at Dunstable before 1119, perhaps before 1100, by a certain Geoffrey, later Abbot of St. Albans, and this is the first reference that we have to such a performance in England. But I must refer to the interesting Introduction of Mr. Pollard for a further account of the Miracle Plays, and their successors, the Moralities and Interludes. It bears out his statement that he has endeavored to make the best use of the labors of his predecessors. A few slight corrections may be noticed. In referring to ten Brink's second volume, not yet translated, the sign '§' should be 'p.'; on p. xxii, note 2, *wherthorn* should be *wherthoru*; p. xxxvii, line nine from end, 'third' should be 'fourth'; on p. xlii, *Accidie* is translated 'gluttony' instead of 'sloth.' The Introduction closes with a notice of Bale's *King John*, written probably in the reign of Edward VI, and a mention of the last performances of the Miracle Plays in the reign of Elizabeth, after the rise of the regular drama.

The text of the Specimens fills 176 pages, the notes 48, and the glossary 26.

If a general criticism were made, it would be that the notes and glossary might have been fuller, especially to the Towneley Play in the northern dialect, *Secunda Pastorum*, the droll story of the stealing of the sheep by Mak and his effort to pass it off as his child, in which he is unsuccessful and gets tossed for his theft. The editor would have done well to append to the introduction, or notes, some account of the grammar and dialectic forms, as the student taking up the earlier plays without previous acquaintance with Middle English, will miss it.

Some omissions of words have been noticed in the glossary, e. g. *apared*, K. J. 1287, although there is a note on the passage; *dewille*, T. 342, *et al.*, possibly regarded as not needing to be inserted; *dowle*, T. 64; *fare*, sb., Y. 613; *feft*, T. 631; *hyppers*, Sk. 1930, possibly like *dewille*; *rouge*, Ch.¹ 290; *scoured*, P. F. 602; and a few passages where a different meaning would suit the context better; *hyen*, C. P. (239)? (238), is rather 'exalt' than 'hasten'; *plye*, K. J. 2164, 'enfold, wrap,' rather than 'apply oneself to'; under *mament*, M. M. 1545 is a wrong reference, and in 1557 *mamentes* = 'idols,' which meaning is omitted; in this line also *pott* is printed *post* in the glossary, and in 1540 M. M. '*pleyeauntly*' is in gl. '*pleyeauntly*,' where *z* = *s*; in M. M. 624, too, *wytyststaff* is in gl. *wytystsauf*. In note on M. M. 484 'Satan' should be 'Luxuria,' and I should have noted above that in T. 640 'Mak' seems to have dropped out at the beginning of the line. In note on T. 294 'He' seems to be *erratum* for 'i. e.,' and on S. K. 1909 (? 1911) 'substantive' should be 'verb'; in Ch.¹ 296 *oughte wher* is questionable for 'anywhere,' except as very bad spelling; *te* may be error of the scribe; in note on P. F. 36 *On* should be *in*; and in note on K. J. 1292 *is* should be *be*—but these are mostly oversights easily corrected when attention is called to them.

In a few passages exception might be taken, I think, to some of Mr. Pol-

lard's translations, but it would prolong this notice to too great length to discuss them. The book is a useful addition to the valuable series of publications that have issued from the Clarendon Press, and a slight revision can be easily made. In a second edition I hope more attention will be paid to the grammar, especially of the earlier specimens. Much useful instruction in Middle English can be derived from a study of the dialectic forms. Several forms occur here which are not found in Stratmann's *M. E. Dictionary*, even as revised by Mr. Bradley, but by the aid of the latter this glossary may be improved. As showing dialectic pronunciation attention may be called to *onste* (once), Ch.² 319, *hunder* (under), T. 24; and *perhennuall*, M. M. 637; also to what is regarded as a modern provincialism, *I reken*, K. J. 1315, although the glossary here gives *reke*, the older form. An appendix contains extracts from two Latin plays, one on the Resurrection and the other, by Hilarius, on St. Nicholas, from *The Harrowing of Hell*, ed. Mall, and from the play of Abraham and Isaac, *Anglia VII*, but without notes, and some words in the texts are omitted in the glossary, as *yeyed*, A. I. 332, perhaps = *joied*, and *harly*, A. I. 350; *leere*, H. H. 166 is erratum for *leeve*.

JAMES M. GARNETT.

Shelley, *Adonais*. Edited, with introduction and notes, by WILLIAM MICHAEL ROSSETTI. Oxford, At the Clarendon Press. New York, Macmillan & Co., 1891.

Mr. Rossetti's edition of Shelley's *Adonais* belongs to the Clarendon Press Series, of which one is accustomed to hear good things said, but this time, to be frank, Shelley has been unfortunate in his editor. It is not an insignificant fact that of the two books found in the pocket of the drowned poet one was a Sophokles, and it is not going too far to say that the Greek element in Shelley is half of his soul, and he who would edit him aright must have Sophokles in his head as Shelley had Sophokles in his pocket. But the present commentator has not thought it necessary to trace the Greek threads in Shelley's diction beyond the pieces of Greek embroidery that the poet had openly wrought into his poem from Bion and from Moschos; and reminiscences of Aischylos and Pindar pass unheeded, as well as reminiscences of Catullus and Lucretius, who deserve to keep company with the Greeks. In lieu of such a study of the weft of Shelley's poetry we have heavy prose paraphrase, we have hopeless puzzlements over passages that are to be conceived poetically or not at all. Here the poet is taken to task for his grammar, and there he is charged with a miserable subservience to the needs of rhyme, as if a true poet's thought were not born singing. In the lines

Great and mean

Meet massed in death, who lends what life must borrow,

'borrow' is supposed to be due to 'morrow' and 'sorrow,' rather than to the vast wealth of Pluto's realm, the *Orci thesaurus*, familiar to every classical scholar. 'Clear sprite,' used of Milton, is said to be 'one of the least tolerable make-rhymes in the whole range of English poetry.' Assuredly any one that knows the history of 'spright' and 'sprite' will forgive the poet his bit of anti-quarianism and rebel against Mr. Rossetti's hard sentence. 'Sprite' is better

than the monosyllabic 'spirit,' which is recognized in our older poetry—though in reading I should never treat 'spirit' otherwise than as a pyrrhic and should decline the charm of 'sp'rit' or 'spir't.' But however that may be, it is amusing to observe that in his righteous wrath Mr. Rossetti forgets to note that Shelley, while describing Milton, alludes to Milton's own words in *Lycidas*:

'Fame is the spur that the *clear spirit* doth raise.'

But Mr. Rossetti's commentary is too distasteful to me for further remark, and for fear of making myself equally distasteful to those who have a better right to Shelley than I have, I will suppress some observations I should like to make on the rhetoric of this wonderful *θρῆνος*, which with all its depth of feeling, like 'Alph, the sacred river,' on its way 'to a sunless sea,' mirrors what seems to be a 'stately pleasure-dome' of rhetorical devices. But Shelley's 'incarnations of the stars' would doubtless 'mock the merry worm' that should batten on asyndeton, polysyndeton and chiasm, and, dismissing the theme of the parallelism between elegy and funeral oration I turn to another matter, the function of the recurrent word. Much has been made of the recurrent word in Pindar, much ought to be made of it but not too much. In Aischylos every one notices—who can help noticing?—not only the burdens of the choruses, but the emphatic repetition of key-words. In fact, echoes abound in all tragic poetry, and it was not reserved for the last decennium to mark the significance of recurrent words and recurrent phrases. Boeckh, for instance, insists on the importance of 'die wiederkehrenden Stellen' in his 'Encyclopaedie u. Methodologie,' p. 152. Yet these recurrences, as Boeckh says, are often enough left unnoticed by the commentators, and Mezger deserves, as he has received, due credit for his observation of the phenomena in Pindar. But, to quote my own review of Mezger (*A. J. P.* II 500), 'The recurrence of a poet in the cycle of his thought to the point from which he set out is natural enough. It is the poetic Q. E. D. Significant words may shine at intervals as brightly as the *stelle* with which Dante ends alike *Inferno*, *Purgatorio*, and *Paradiso*, but the art which we are called to admire here, if established, would not be much more elevated than that of an acrostic.'¹ In my commentary I have again and again made use of Mezger's observations. I have myself noted the repetitions of words and synonyms as showing the thoughts that were dominant in the poet's mind. 'The keynote,' I say (*I. E.* p. lxxiv), 'is struck at the very beginning' of the Paionian odes (*O.* 2 and *P.* 5). 'In *O.* 2 *θεός, ἥρως, ἀνὴρ* recur with a persistency that cannot escape the most careless observer, and in *P.* 5 we have really nothing but a series of variations on *πλοῦτος, ἀρετή, πότμος*, another trinity.' But for all that, I maintain that 'no high poetry is exhausted by its recurrent burdens, its catch-words, its key-verses,' and the danger of insisting too much on these matters is only too evident. If the recurrent word is to be a norm of composition it must be put where it will be felt; but Bulle demolished the recurrent word as a norm of composition, on the ground that there were too many recurrent words; and so there was nothing left for the original mind of Mr. Bury, the latest editor of Pindar, except to maintain that for the seeker after Pindar's

¹ Ripugna prestare al poeta siffatte intenzioni, perchè allora le odi Pindariche si risolverebbero in altrettanti logogrifi o sciarade. — Cerrato, La tecnica composizione delle odi Pindariche, p. 90.

inner meaning the more recurrent words, the merrier. Now, in the Adonais of Shelley we have a poem that is full of recurrent words, and a concordance to the Adonais would enable us to juggle with recurrent words so as to swell considerably the bulk of Mr. Rossetti's swollen edition. Let us make just one experiment.

The key-words of the poem are clearly to be found in 1, 8, 9:

His fate and fame shall be
An ECHO and a LIGHT unto ETERNITY.

'Eternity' is the last word of the first stanza, 'eternal' are the last words of the last stanza. Here the poet evidently intended to indicate by this recurrence the consecrated symbol of eternity—the circling serpent. 'Eternity' is found 30, 3 so as to keep the poem from breaking in half, a danger which is barred, to be sure, by the odd number of the stanzas, fifty-five. 'Eternal' recurs also 8, 6, 24, 9, 38, 7, and it would be easy to see a special significance in the sequence of these two words:

Eternity
Eternal
Eternal
Eternity
Eternal
Eternal

'Echo' being a fugitive thing, cannot be expected to last, in spite of the poet's promise, and so the echo-note soon dies out. We have 'echoes' 2, 5 and 22, 6 and that is all. But if we take the second word, 'light,' and trace it throughout the poem, including, as our hobby-riders would have us include, the sound as well as the sense, 'delight' as well as 'light,' 'light,' 'not heavy,' as well as 'light,' 'luminous,' then there streams over the poem a dazzling radiance which those eyes must be holden that do not see. There are about twenty 'lights' in the fifty-five stanzas, and while 'light' glitters in every place of the tuneful nine verses, from the first to the last, it is in the last and the most emphatic verse of the stanza that it has its special home:

Yet reigns o'er earth, the third among the Sons of *Light* (4, 9).

And bursting in its beauty and its might
From trees and beasts and men into the heaven's *light* (43, 9).

And move like wings of *light* on dark and stormy air (44, 9).

A *light* of laughing flowers along the grass is spread (49, 9).

So we have repeated throughout the poem the keynote which reveals the meaning of Adonais and prepares us for the conclusion:

The soul of Adonais like a *star*
Beacons from the abode where the *Eternal* are.

Very good results can be got from 'death' or 'life,' but I forbear. The trouble about the matter is, as Bulle said in his criticism of Mezger, if one begins playing with these things one is in danger of losing one's sanity and believing in them.

B. L. G.

ΑΘΗΝΑΙΩΝ ΠΟΛΙΤΕΙΑ. Aristotle on the Constitution of Athens, edited by F. G. KENYON, M. A. London, The British Museum, 1891.

In the *Revue Critique* of March 9, B. Haussoullier gives the following advice in regard to the 'Αθηναίων πολιτεία: 'Empressez-vous d'acheter l'édition de Kenyon et de la lire. Demain vous serez débordés par des commentaires: de tous côtés viendront des *ciceroni* qui se proposeront à vous comme guides et dont vous ne pourrez vous débarrasser: il en viendra d'Angleterre, de France (j'en suis sur), d'Allemagne, de Grèce peut-être. Ne les attendez pas. Enfermez-vous avec les trois livres suivants: l'édition de Kenyon, les fragments d'Aristote publiés par V. Rose dans la collection Teubner (1886), enfin la *Politique* d'Aristote (édition Susemihl)—et n'ouvrez votre porte qu'après avoir achevé votre lecture. Je vous promets un jour ou deux de pleine jouissance et d'enchantement.' Sound advice in my judgment, but too late for anything more than registry in this tardy number of the *Journal*.

The day after Haussoullier's advice was published the press copy of the second edition reached the office of this *Journal*. 'Quelle découverte, quelle surprise, quel trésor,' says the venerable Barthélemy Saint-Hilaire in a summary of the book published a few weeks ago in the *Revue Bleue* (March 21, 28), but I am sorry to say that little is to be gained from the summary except the exclamation that I have cited, for M. Saint-Hilaire has followed the guidance of Mr. Kenyon much too closely—and, in fact, any guidance at this stage is not to be trusted. The most important conclusions depend on the restoration of a lacuna here and the assumption of an interpolation there, and the attainment of the ultimate text has not been forwarded by the scores of emendations that have flooded the press since the 'Αθηναίων πολιτεία first became common property. French and German scholars are, so far as I have seen, unanimous in their gratitude to Mr. Kenyon. Mr. Kenyon's own countrymen have shown him scant courtesy, and have counted too lightly the merit of deciphering the MS, which a scholar like Blass regards as 'no trifle' (was bei der grösstentheils cursiven Schrift keine Kleinigkeit war. *Lit. Centralbl.* 28 Febr.). And Blass's judgment is echoed by the German translators, Kaibel and Kiessling, who speak of 'the incomparable skill with which Kenyon has deciphered the difficult papyrus.' For one I am too grateful to Mr. Kenyon to join the chorus of depreciators; and when the hurly-burly is done, it may be worth while to ask whether all that abuse of the careless accentuation of the first edition comes with a good grace from a region that is full of accentual sinners, and whether some of the restorations and emendations are not bad enough to console Mr. Kenyon for the harshest strictures of his English critics. One scholar, in order to save formal grammar, insists on διασῶσαι for διασώσεν (p. 93, 1) and effaces a bit of Thukydidean syntax (Goodwin: M. and T., §113) in favor of a bad hiatus. Something must be done with συμμιγεῖν τι (p. 109, 13), but as -ειν, according to Kenyon, is certain, συμμιγῶσι is a brutal emendation, only fit for a novice in the art. συμμιγεῖς ὦσι would be at least comprehensible. What could be more heedless than to read τῶν ἐσθλῶν, a rank poetic word, instead of τῶν ἐτέρων (p. 77, 15 and p. 78, 5)? And if the editor of the *American Journal of Philology* had not been so often guilty of oscitancy, he might have asked the editors of the *Classical Review* what they were thinking of when they allowed a grammatical hero to emend the innocent αἰτιάται (p. 142,

18) by clapping an impossible iota subscript under its harmless penult. Another scholar, puzzled by the intransitive use of *άσαστε* (p. 15, 5) in a fragment of Solon, calmly writes *ήίσαστε*, a manufactured 2 p. pl. from *ήα*, as is shown by his translation, 'who have arrived.' 'Should we correct *ήίσαστε*?' he asks. I trow not. But I forbear. If Mr. Kenyon has made worse mistakes in Greek than some of his critics, I have failed to notice them.

But the human lessons and the philological lessons to be learned from the *editio princeps* of the *Ἀθηναίων πολιτεία*, and from the comments of the goodly fellowship of textual critics, will, I trust, be expounded in the pages of the Journal by abler preachers than I am. Still I cannot withhold from younger scholars the delectable parallel between the text of the *Ἀθηναίων πολιτεία* and Bergk's restoration. It is the severest warning imaginable against the self-confidence that dares a restoration on any large scale.

Berlin Fr. IIa, Bergk's restoration.¹

(Μετὰ δὲ) | ταῦτα Ν(ικ)οδόμου ἀρχοντος τοῖς τὰ μέ-) | ταλλα τὰ ἐν Μαρωνείᾳ καὶ τὰ ἐν Λαυρεΐῳ | κекτη(μένοις) τὰ εἰς² κ(αινὰ ἔργα ἀπο-) | δόντων (τῶν) πωλητῶν³ καὶ μελλόντων τὸ ἀρ-)γύριον (διανείμει, Θεμιστοκλῆς παρὼν εἰπεν,) ὅτι χρὴ διανομὴν ἑάσαντας ποιήσασθαι | [ναῦς ἐπὶ τὸν πόλεμον, καὶ δοῦναι ἑκατὸν με-]⁴ | ταλλεῦσι (τοῖς) ⁵πλο(υσιωτάτοις εἰς νεὼς κατασκευασ)μόν⁶ ἑκάστῳ τάλαντον καὶ ἑὼν ἀρέσῃ ἡ ναῦς,) | τ(ὸ) ἀνάλωμα τῆς (νεὼς τῇ πόλει λογισθῆναι) | ἐ(ὰν) δὲ μή, κομίσασθαι (τὸ δανεισθὲν· παρὰ δὲ τῶν) | δα(ν)είσασμένων λα(βεῖν ἐγγύους· οἱ δὲ ἑκατὸν) | ἐ(π)οίησα(ν) τριῆρεις (κάλλει καὶ τάχει διαφερούσας.)

Ἀθηναίων πολιτεία, Kenyon, 62, 6 foll.

ἔτει δὲ τρίτῳ μετὰ ταῦτα Νικοδόμου ἀρχοντος, ὡς ἐφάνη τὰ μέταλλα τὰ ἐν Μαρωνείᾳ καὶ περιεγένετο τῇ πόλει τάλαντα ἑκατὸν ἐκ τῶν ἔργων, συμβουλευόντων τινῶν τῷ δήμῳ διανείμασθαι τὸ ἀργύριον, Θεμιστοκλῆς ἐκώλυσεν οὐ λέγων ὅ τι (ὅτι K.) χρήσεται τοῖς χρήμασιν, ἀλλὰ δανείσαι κελεύων τοῖς πλουσιωτάτοις *Ἀθηναίων* ἑκατὸν ἑκάστῳ τάλαντον, εἰτ' ἐὰν μὲν ἀρέσκη τὸ ἀνάλωμα, τῆς πόλεως εἶναι τὴν δαπάνην, εἰ δὲ μὴ, παρακομίσασθαι (read κομίσασθαι, K., Class. R., March, 1891) τὰ χρήματα παρὰ τῶν δανεισασμένων, λαβὼν δ' ἐπὶ τούτοις ἑνα(ν)πηγήσατο τριῆρεις ἑκατὸν κτέ.

No commentary is needed. We are not to read *εἰς* for *ΕΚ*, nor *πωλη* for *ΠΟΛΙ*, nor *-μον* for *ΤΟΝ*. No line is omitted and the *ΑΠΤΑC* supposed to be in the text must have been misread. Polyainos does not enable us to restore Aristotle, and, after making all allowances for the variants of Polyainos's original, the reweaving of the torn and tattered text has not been a success. Even the darning has not been all that could have been desired, for any poor grammatical needle-threader would have put the *εἰ δὲ μή* of Aristotle in antithesis to *ἐὰν* (μέν), rather than the *ἐὰν δὲ μή* of Bergk. Here, as often elsewhere, an ounce of MS is worth more than a hundred-weight of conjectures.

The astounding novelties brought to light by the Constitution of Athens are, it is true, in a measure independent of any reading of the text. The Kylo-nian disturbance had been put before Draco by some scholars, but no one had dreamed that Draco had any hand in constitutional changes; and, no matter

¹ On the basis of Polyain. Strateg. 1, 30, 6. See Rh. Mus. N. F. XXXVI (1881), p. 107.

² *εἰς* for *ΕΚ*. ³ *πωλητω* for *ΠΟΛΙΤΩ*.

⁴ Line dropped by carelessness of scribe.

⁵ *τοῖς πλουσι-* for *ΑΠΤΑC*.

⁶ *-μον* for *ΤΟΝ*.

how it may be accounted for, the dead silence as to the severity of Draco's legislation is as surprising as the mention of his constitutional readjustments. The explanation that in a work on the constitution, Aristotle had only constitutional changes in view, is by no means satisfactory, for there is no such rigorous exclusion elsewhere of extra-constitutional matter. Now, when we come to this important point, what do we read in a certain summary? 'The upper classes gave way and agreed to invest a leading citizen, named Draco, with full powers to reform the constitution.' What does Aristotle say? *μετὰ δὲ ταῦτα* (the Kylonian troubles) *χρόνον τινὸς οὐ πολλοῦ διελθόντος ἐπ' Ἀρισταίχμον ἀρχοντος Δράκων* τοὺς θεσμοὺς ἔθηκεν. 'The upper classes giving way,' 'the leading citizen,' 'the full powers,' 'the reform of the constitution,' are inferences, natural inferences, if you choose, but they are extra-Aristotelian. And so it is everywhere. The temptation to read between the lines is so strong that summaries are not to be trusted, and the only translation I have seen thus far, Kaibel and Kiessling's, is a paraphrase of which a like complaint may be made. In spite of the best intentions, the old controversies sway the pens of those scholars who have undertaken at short notice to rewrite the history of Athens from the point of view of this important document; and delight at the confirmation of former guesses and disgust at the refutation of previous fancies make it very hard to deal with the personal equation. The man who knows nothing about the history of Athens cannot understand the significance of the new document, and he who knows too much is sorely tempted to wrest it or to underrate it.

It will be a long time before all the accessions that have accrued from this, the most important find of the century, shall have been registered and distributed. Grammar and lexicography are not without their share, and I have elsewhere called attention to a use of *ἕως* for which the grammars have been waiting. The regularity of *πρὶν* has found additional evidence, and my conjecture, made years ago (A. J. P. I 458; IV 92), Solon, fr. 36, 21,

πρὶν ἀναταράξας πῖαρ¹ ἐξεῖλεν γάλα

has been confirmed, and, as Mr. Kenyon says there is room for *ἀνατ.*, that is perhaps better than Mr. Adam's more seductive *ἀνταράξας*, Crito 44 D (see The Nation, Apr. 2, 1891). And not only has the *Ἀθην. πολιτεία* corrected a passage that was known before, but it has brought us some new fragments of the great Athenian poet and lawgiver; of short compass, it is true, but not without interest. The elegy which is put down as fr. 4 Bergk, notoriously lacks the beginning, and this beginning is supplied by Aristotle. Another fragment seems to lurk in the sentence (fr. 15, 10): *διὸ καὶ ἐν ἀρχῇ τῆς ἐλεγείας δεδοικέναι φησὶ τὴν τε φιλαργυρίαν τὴν τε ὑπερηφανίαν*. The double *τε* connecting two words is more than suspicious, and so is the rhythm:

** τὴν τε φιλαργυρίην τὴν θ' ὑπερηφανίην.*

The jingle as in

4, 20: *ὅς πολλῶν ἐρατὴν ὤλεσεν ἡλικίην.*

32: *ὅς κακὰ πλεῖστα πόλει δυσνομήν παρέχει.*

10, 2: *δείξει ἀληθείης ἐς μέσον ἐρχομένης.*

11, 4: *καὶ διὰ ταῦτα κακὴν ἔσχετε δουλοσύνην.*

¹ The *Ἀθην. πολ.* has *πῖαρ*.

The article, which Solon uses rarely, as in 15, 3, with a strong deictic sense:

ἀλλ' ἡμεῖς αὐτοῖς οὐ διαμειψόμεθα
τῆς ἀρετῆς τὸν πλοῦτον,

though we should expect *ὑμετέρην* as in *ὑμετέρην κακότητα* (11, 1). How many have 'discovered' this I do not know. Two of England's most distinguished scholars are credited with the observation in the March number of the Classical Review. The only wonder is that it should have escaped the editor. And yet the verse is not very satisfactory as a verse, and those who laugh at

Bellerophonteis sollicitudinibus

will have to plead the Bellerophontean anxieties of Solon's position as a justification of this inartificial pentameter, which cannot be paralleled in Bergk's Elegiac Poets. But that something of the sort must have stood in the original is shown by Plut. Sol. c. 14, 3: *ὁκνῶν φησὶ τὸ πρῶτον ἀφασθαι τῆς πολιτείας καὶ δεδοικὼς τῶν μὲν τὴν φίλοχρηματίαν τῶν δ' ὑπερβοανίαν*. And yet it is dangerous to proceed mechanically in this matter of restoration, lest one be tempted by the rhythm into some such pitfall as engulfed Kock when he was seduced by the iambic tetrameter into the memorable identification of a solemn verse of St. Paul (2 Tim. 4, 6) with a comic *ἀδέσποτον* (No. 768).

It will be observed that in this preliminary notice I have not adorned the name of Aristotle with the quotation-marks by which some scholars have undertaken to exhibit a scholarly skepticism. That the book is the book known in antiquity as Aristotle's is beyond a question. Whether it was composed by Aristotle himself is another matter. Some have missed Aristotle's technical terms, his familiar crabbednesses, his significant implications. But Aristotle was a man of the world as well as a philosopher, and as a man of the world he must have had more than one style, so that it would be fairer to admire his versatility than to insist on uniformity. If I may be allowed to record my own impressions, receiving the book before the flood of criticisms reached me, my first thought was to compare the *Ἀθηναίων πολιτεία* with the more fluent portions of the Politics, and mindful of what Blass had noted in his *Attische Beredsamkeit* II 428, I kept watch for hiatus, for rhythm, and not in vain. In what I may be pardoned for calling the aridities of the Aristotelian corpus, the *flumen orationis aureum* of which Cicero tells us runs far underground, but the *Ἀθηναίων πολιτεία* enables us to understand that the current of this simple brook might be swollen into a golden stream. Mr. Newman, who ought to know, is skeptical, but Diels, who has a right to be heard, concludes his essay in the *Archiv für Geschichte der Philosophie* IV 3, p. 479, with the following words: 'Diese *Ἀθηναίων πολιτεία* (ist) nicht nur echt aristotelisch sondern aristotelischer als die meisten der uns erhaltenen Lehrbücher an welche sich jene Skeptiker halten.'

B. L. G.



REPORTS.

ZEITSCHRIFT DER DEUTSCHEN MORGENLÄNDISCHEN GESELLSCHAFT.¹

Vol. XLIII.

Pp. 1-29. Schlechta-Wssehrd, in his article on Firdusi's poem, 'Jussuf and Suleicha' (ZDMG. 41, 577; A. J. P. X 237), said that it was based on Sura (12) Joseph in the Korân and on rabbinical traditions. M. Grünbaum, however, shows that both the Arabic and the Persian legend owe very little to the Jewish Hagada; the Persian having gone its own way, just as the Sura 12, which deviates in many particulars from the Biblical narrative. The connection between Sura 12 and the Talmudic הַנֶּרֶךְ is traced. A short time after this article was written Schlechta-Wssehrd published a German translation of Firdusi's Jussuf and Suleicha (1889), which is commented upon by Grünbaum in another article, Vol. 44, 445-477; at the same time there are added some notes on the 'Poema de José' and the 'Leyendas de José hijo de Jacob y de Alejandro Magno,' por F. Guillén Roblei (1888), two Spanish versions of the same Persian poem.

Pp. 30-52, 609-13. P. Horn prints transliteration and translation of Fargard the 6th and 17th, with an excursus on the decipherment of the Pahlavi-papyri of the Royal Museum at Berlin.

Pp. 53-68. O. Böhlingk examines the epic peculiarities of Books I-IV and VII of the Rāmāyana, edited by Gorrescio, and shows that they are not archaic, but later formations, based on the analogy of other forms for the sake of the metre, and that this is the reason why they disappear so soon.

Pp. 69-98. The oldest Turkish poem, next to the Kudatku Bilik, composed in the year 463 of the Hejira, is that on the Patriarch Joseph, described by L. Fleischer in the Catalogue of the Dresden Library, No. 419. It was composed in 1233 A. D. by a certain 'Ali. Th. Houtsma edits the text and translation on the basis of two MSS belonging respectively to the libraries of Berlin and Dresden. A third MS, at Gotha, differs materially from the former two. The contents are the same as Firdusi's 'Jussuf and Suleicha.'

Pp. 99-120, and Vol. 44, 373-89. K. Vollers. Notes on the viceregal library at Kairo, (a) the historical works and MSS and (b) the medical books. V. also shows, Vol. 44, 390, that 'Aš-Ša'rānt' in the P. N. 'Abd-el Wahhāb b. Aḥmed Aš-Ša'rāni does not mean 'the hairy' (hair = شعر); but that his name Ša'rāwī is a Nisbe-formation from Ša'ra, his birthplace, while Ša'rānt is the same form derived from the ward Bab-eš-Ša'rīja, his place of residence in Kairo.

¹ See A. J. P. X 237.

Pp. 121-7. R. J. H. Gottheil prints addenda and corrigenda to his 'A List of Plants and their Properties from the Menārath Qudhšê of Gregorius bar 'Ebhṛâyâ'; in Vol. 44, 392 he has a note on the name of a lexicographical treatise by Honein bar Ishâq.

Pp. 128-76, 273-96 and Vol. 44, 702-4. G. Bühler received not long ago from Dr. J. Burgess new squeezes of the inscriptions bearing the name of Pyadasi, the Açoka of Southern Buddhists. These edicts exist in various recensions: (1) that of Girnâr, (2) that at Khâlsi, (3) the Shâhbâzgarhi version, (4) the Mansehra edicts, and (5) that of Babra. B. published first the Shâhbâzgarhi version of 14 edicts, with constant reference to Prof. Sénart's work (J. A. 1888, Vols. XI and XII).¹ Notes on the Northern Indian alphabet precede the Devanâgarî text, Latin transliteration and a running commentary. Edict XIII is published in the three versions of Shâhbâzgarhi, Khâlsi and Girnâr. In the second and the third paper B. studies in the same manner the 14 edicts of the Mansehra version. The writing differs but slightly from that of the Shâhbâzgarhi edicts.

Pp. 177-99. In his third article on comparative studies in Semitic philology J. Barth shows that the Y-imperfect of the Qal in the North-Semitic languages was not so rare as scholars generally believe. Many imperfects which have thus far been considered Hiphil-forms are Qal-imperfects. The original Y-imperfect was either supplanted by the u-imperfect or changed into the transitive a-imperfect.

Pp. 192-205. P. Jensen. On prefixes to nouns in Assyrian. Barth, ZA. II 111, had shown that the nominal prefix n- in Assyrian goes back to an earlier Semitic m-, and that the n- was a result of dissimilation in words containing a labial m, b or p; the only exceptions being nannaru, mamîtu, oath, and mûšabu, dwelling, našaddu probably being a Niphal derivative. J. believes that mamîtu is from *mamû,² and mamlu, strong, from $\sqrt{m-m-l}$; the prefix mu- is due to the influence of the participial forms in mu-; našaddu he reads nawaddu from נָוַד; in nadušu, ni'lû, nallutu, nannu, nannaru and naççaru the prefix n-, instead of m-, is due to the following lingual; for nug-gat read nuk-kum from nakamu, whence also ikkimu, revenge (but see Del. Wört. 394).

Pp. 206-72. W. Bacher describes the literary apparatus of Elias Levita and mentions the authorities which he quotes in his works; he shows what L. has done as interpreter and critic of his predecessors; his merit as a grammarian and lexicographer; his importance as a student of the Targum and the Massorah, and his contributions to the exegesis of the Bible. On p. 534 we find an additional remark on the notation of Hebrew accents.

Pp. 297-307. The Rasavâhînt is a collection of 103 Buddhistic stories of a legendary character, of which the first forty are Hindu, the rest Sinhalese. They are divided into ten books called Vaggâs, each book containing ten stories. The last three are not counted in. The first four were edited by Spiegel in his *Anecdota Pâlica*. Steen Konow edits text and German translation of Nos. 5 and 6.

¹ A. J. P. X 488.

² mamîtu instead of namîtu may be due to the fact that we have already namîtu from namû.

Pp. 308-12. Peshotan Sanjana, in his book 'Next-of-kin Marriages in Old Irân' (London, 1888), asserts that the remarks of the Greek writers concerning such marriages were worthless; that neither the Avesta nor the Pahlavi-books ever recommended such a practice, and that the words *χwaetvadaθa* (Zend) and *χwetûkdas* (Pahl.) simply mean gift of communion. E. W. West, however, has proved that in Pahlavi the word really meant next-of-kin marriage. Hübschmann now shows that Sanjana is right as far as the teaching of the Avesta goes, while, on the other hand, the testimony of the Greeks and the Armenians has to be upheld. E. Kuhn (p. 618) adds another proof of this custom from G. Hoffmann's *Auszüge aus syrischen Akten persischer Märtyrer*.

Pp. 317-26. F. Praetorius contributes a paper on Hamitic elements in the Ethiopic language, showing their influence, especially upon the Amharic.

Pp. 327-8. Th. Nöldeke has a remark on As-Sabtî, son of Harûn-ar-Rashîd.

Pp. 329-52. Sprenger reviews E. C. Sachau's edition of Alberuni's *India* (in two volumes, London, 1888).—Kamphausen bestows high praise on E. Kautzsch and A. Socin's translation of *Genesis*, and Leuman notices G. Bühler's biography of the Jain monk Hemaçandra, the pupil of Devaçandra.

Pp. 353-87. K. G. Jacob begins a series of studies of the commerce in the Middle Ages between the Caspian and the Baltic, with a discussion on the amber. Speaking of Oppert's view that the Assyrians knew the amber, he repeats the mistake of some of his predecessors by quoting II Rawl. 28, instead of I Rawl. Hebr. *אֲמֵרִים* (Exod. 30, 34) is = Arabic *sacal* (amber). He then treats of the meaning of 'Kahrubâ' in the Middle Ages and in modern times. E. Rehatsek (p. 673) sends an additional remark to this article.

Pp. 388-414. T. Guidi. East Syrian Bishops in the fifth to the seventh century.

Pp. 415-63, 555-78 and Vol. 44, 478. K. Himly sends two articles on terms in games, other than chess, tracing their oriental or occidental origin.

Pp. 464-7. H. Jacobi, the distinguished Jain scholar, discusses the *Udgatâ-metre*.

Pp. 468-524. G. A. Grierson continues his specimens of the Bihârl language (from Vol. 29, 617); he examines the Bhoj'pûrl dialect and edits a song with translation into English.

Pp. 525-34. W. Bang sends ten pages of notes on the Achaemenian inscriptions, with an additional remark (p. 674) on the religion of the Achaemenians.

Pp. 535-54. Nöldeke has a long review of K. Kessler's *Mani* (Vol. I, Berlin, 1889), agreeing, on the whole, with A. Müller (*Theolog. Literaturzeitung*, 1890, No. 4) and Rahlfs in *G. G. A.* 1889, No. 23, that the book contains a number of great mistakes. Vol. 44, 399, he prints an additional note on the river Strangas.—E. Meyer calls attention to the important book by Th. Nöldeke on Persian history (Leipzig, 1887).

Pp. 579-89. W. Geiger. *Balûçî* texts and translation, being the modern Iranian dialect spoken in Beluchistan. Vol. 44, 549-61 we find two very

favorable reviews by Bartholomae and Hübschmann of the same scholar's 'Dialectspaltung im Balúči,' and 'Etymologie des Balúči' (München, 1889 and 1890).

Pp. 590-5. O. Roth explains Kātyāyana (ed. Weber, pp. 356, 362 and 366) on the fire-drill, a later improvement on the primitive fire-sticks.

Pp. 596-606. P. Böhlingk believes, against P. Peterson, that Nārāyaṇa is not the author of the Hidopadeṣa; he also examines several cases of alleged irregularities in language in Hiraṇyakeśin's Gṛhjasūtra (edited by I. Kirste); and discusses again the legend of the goat and the knife (Mahābhārata, ed. Calc. II 2193), differing from the interpretation of the same story as given by R. Pischel in his 'Vedische Studien,' I 182. The discussion is continued by R. Roth, in Vol. 44, 371 f., whom Böhlingk answers (ib. pp. 493-4), while Pischel (ib. 497-500) defends his interpretation against the objections raised by Böhlingk and Roth.

Pp. 607-8. Böhlingk combats some statements touching attraction in gender in Sanskrit, made by O. Franke in his book 'Die Indischen Genusregeln.' In Vol. 44, 481 ff. Franke prints an answer to Böhlingk's objections.

Pp. 613-15. W. Bacher mentions עפרא לפומיה 'dust in the mouth,' a Jewish-Aramean proverb, analogous to the Arabic saying discussed by Goldziher in Vol. 42, 587.¹

Pp. 616-18. F. Praetorius, discussing the Arabic term ḥarfu'linkāri, hardly knows how to explain it. It is evidently the same as the Assyrian enclitic particle -u = nonne, ne, e. g. anakū, am I not?; also compare Ethiopic hā and perhaps Hebrew הָ.

Pp. 619-52 are taken up by an article of J. Zubaty on the structure of the triṣṭubh- and the jagati-metre in the Mahābhārata.

Pp. 653-63. The famous discoveries, by Eduard Glaser, of Sabeian and South-Arabic inscriptions, have called forth several articles and reviews. F. Hommel speaks of the South-Semitic word for wine, with special reference to the Sabeian inscription, Glaser No. 12, to which is added a postscript by Glaser (pp. 662-3). Against Hommel, P. Jensen, in Vol. 44, 705, shows that also the Assyro-Babylonian had the common word for wine, 'inu,' comparing V Rawl. 52, 64-65a and II Rawl. 25, 38ab; Del. Lesest.², p. 84, col. iv, 15. Hommel's article was, on the whole, a polemic against J. H. Mordtmann. The latter prints a reply in Vol. 44, p. 201. For further articles see below.

Pp. 664-70. C. Bartholomae contributes some Aryan notes, interpreting passages of the Rigveda and the Avesta.

Pp. 671-3. R. von Stackelberg continues his Ossetian studies (see Vol. 42, Heft 3).³

Pp. 675-706. Nöldeke reviews G. Cardahi's Pardaisa d'ha Edben seu Paradisus Eden. Carmina auctore Mār Ebed Isō Sobensi and H. Gismondi's Ebed-Iesu Sobensis carmina selecta ex libro Paradisus (sic!) Eden (Beyrouth, 1889

¹A. J. P. X 236.

²A. J. P. X 234.

and 1888).—Stickel pays high tribute to H. Lavoix's *Catalogue des monnaies Musulmanes de la Bibliothèque Nationale. Khalifes Orientaux* (Paris, 1887), and H. Schils recommends C. de Harlez's edition of *Yih-king* (Bruxelles, 1889).

A. Socin closes the volume with a short memorial sketch of the late Heinrich Thorbecke (born 14 March, 1837, and died 3 Jan. 1890).

Vol. XLIV.

Pp. 1-82. Dr. Kühnau publishes the metrical collections of the late Prof. Stenzler. The collections of metrical systems based on the Vedic literature are to a great extent antiquated, while those based on the later Sanskrit literature, the renaissance, are of the greatest importance, since they enable us to observe the spread of the metrical systems during that period. Kühnau observes the chronological order, the period of Kalidāsa forming the centre around which the others are grouped.

Pp. 83-97. R. Simon examines the three main groups of the four-syllable Pāda-systems of the *Çloka* in Pāli, the Buddhistic literature.

Pp. 97-141 contain text and German translation, by F. Rückert, of the Love-songs of Dshāmi.

Pp. 142-53. E. Wilhelm, in an article on priests and heretics in ancient Iran, based on the study of the Avesta, shows that the conflict between the state and church is by no means confined to the Christian church, but is found even in those early days and carried on with a full appreciation of its importance.

Pp. 154-64. M. Wolff has a word on religion and philosophy as conceived by Sa'adya al Fayyūmī. S. is the great forerunner of those who maintain that religion and philosophy do not necessarily contradict each other.

Pp. 165-8. T. Goldziher. The title 'ship of the desert' given to the camel — a pendant to the Homeric *ἀλλος ἱπποι* (δ 708) = ships—shows that the early Arabians were a seafaring nation. A second note treats of the formulas of confession among the Almohades.

P. 169. Wellhausen corrects two mistakes of E. Glaser with respect to the priests of Ruxahāt, and the date of the siege of Medina by Tubba', a prince from Southern Arabia, which took place in the middle of the sixth century A. D., not c. 300 A. D., as Glaser believes.

Pp. 173-95. J. H. Mordtmann reviews E. Glaser's sketch of the history of Arabia, from the earliest time to Muhammad (Part I), and Hommel's remarks on the historical gain from the South-Arabic inscriptions discovered by Glaser (Munic, 1889). Glaser had questioned many statements made by Mordtmann and D. H. Müller in their 'Sabäische Denkmäler.' M. now answers Glaser, combating many of the latter's statements and inferences as well as readings and interpretations. On pp. 501-20 A. Sprenger criticises Mordtmann's remarks on the character and the history of the Minneans. He also reviews E. Glaser's sketch of the history and geography of Arabia (Berlin, 1890) with special reference to Glaser's words (p. 377) that 'the name Ophir has nothing to do

with the Mahritic a'fur (red) because the latter was pronounced with 'Ain. Sprenger's identification has to be given up.' S. maintains that Ophir is = *ἀπυρος*, denoting properly the color, not the place where the most valued gold was found. The χρυσὸς ἀπυρος, aurum apyron, was a very costly species of reddish gold. On pp. 721-6 we find Glaser's answer to Sprenger's remarks. G. considers Ophir a geographical name, and believes that the Ophir- and Paradise-legends cannot be treated separately. Glaser thought that he had found the Paradise-river Gihon (גִּיחֹן) in the Arabic Ġaiḥān in Central Arabia; but Noldeke, on pp. 699 f., shows that Bekri, Glaser's authority, was wrong. The Ġaiḥān, as shown by Jāqūt, is the Pyramus river, which in Arabic writers was, without reason, named Ġaiḥān, after the name of the Paradise-river.

Pp. 196-200. Brünnow has words of high praise for C. Bezold's Catalogue of the cuneiform tablets in the Kouyunjik collection of the British Museum (Vol. I, London, 1889).

P. 202. Wüstenfeld corrects three mistakes which had crept into his 'Comparative tables of Muhammadan and Christian chronology.'

Pp. 203-55. The Sarts and their language are treated by H. Vambéry. The Sarts, originally an Iranian people, had changed their mother-tongue for the Turkish. The name Sart is connected with that of the river Jaxartes. Jaxartes is the Turkish jaka sari, 'the country along the river,' and jaka sarti denoted 'the people living along the banks of a river.' The purely local name became in time an ethnological one. Sart denoted the settler in distinction from the nomadic tribes. Of the greatest importance for the study of their customs and habits are the popular proverbs, published by M. N. Ostroumow. They are written in Persian or in the Turkish dialect common to all the inhabitants of Central Asia, called the Usbek dialect. Vambéry prints and translates 486 proverbs.

Pp. 256-66. F. Kühnert discusses the question whether the Chinese tsiet-k'i is the name for every single solar term, the twenty-fourth part of a solar year, and whether the invisible star k'i is our solar cycle of twenty-eight years; he comes to the conclusion that the uneven solar terms are called tsiet and the even k'i. The combination of the two, tsiet-k'i, denotes the solar terms as a whole, as the tsiet + k'i's.

Pp. 267-320. On the basis of three new MSS, L. Blumenthal prints his doctor-dissertation entitled: "Critical Emendations to Gustav Bickell's Kalilah and Dimmah, being an ancient Syriac translation of the Sanskrit 'Fürstenspiegel.'"

Pp. 321-38. Bartholomae, in his 'Studien zur indogermanischen Sprachgeschichte,' I (1890), 81-116, objected to Oldenberg's treatment of the Abhinibhita Sandhi in the latter's edition of the R̥gveda. O. replies to these objections, examines Bartholomae's theory of the nature and origin of the A. S. and adds his own views.

Pp. 339-62. J. Jolly sends contributions to the history of Indian law. (1). On yāt (= to pay) and vaira yātana (= payment of the blood-money) based on Manu VIII 158. (2). Indian polyandry and Persian marriages of next-of-kin

in Brihaspati are proved to have existed very early. It is by no means the marriage with a deceased husband's brother, but a marriage with several brothers at the same time. This is an additional proof of the truth of Hübschmann's statements in Vol. 43, 308. (3). Theory and practice in legal proceedings under the Old Hindu law.

Pp. 363-72. W. Bang shows that the Pahlavi version of the Gathas strictly follows the order of words of the original. If this is established it will prove a great help for the study of the original texts. Then follows a discussion of Yasna XXVIII 1-4.

Pp. 393-400. Among the Book Notices we find a review by Bacher of H. Strack's edition of the Mishnah tract 'Shabbath'; and by Wellhausen of C. Brockelmann's *Ibn al-Athîr's Kâmil fit-ta'riḥ* and its relation to Ṭabarî's *Ahbâr errusul walmulûk*.

Pp. 401-44. A. Fischer publishes new extracts from Aḍ-Ḍahabî's *Taḍ-hib-at-Tahdîb* and Ibn An-Nağğâr's *Kamâl*, as a supplement to his book 'Biographies of authorities quoted by Ibn Ishâq' (Leiden, Brill).

M. J. de Goeje believes that Zâr, the name of ghosts troubling women in Mekka, came from Abessynia to Arabia. Also see Nöldeke on p. 701.—O. Böhtlingk sends three pages of additions and corrections to H. W. Magoun's *Asûri-Kalpa* (A. J. P. X 165-97); and then discusses, on p. 492 f. the Sanscrit root 'art,' mentioned by Oldenberg and Whitney, 'Sanskrit Roots,' p. 15.—The general belief that the Hindus exposed their female children is based on a wrong translation of a Sanscrit verb, which really means 'to put aside,' i. e. to deliver a child to the nurse immediately after its birth, instead of lifting it up, as was done in the case of boys, to give expression to one's joy.

Pp. 520-35. Nöldeke reviews (1) Chowlson's *Syrisch-nestorianische Grab-inschriften* (Petersbourg, 1890); the book contains 200 sepulchral inscriptions gathered in the old graveyards of Tishpek and Tokmak in Southern Siberia, dating from the middle of the XIII to the middle of the XIV saeculum of our era; (2) Abbeloos' *Acta Mar Kardaghi* (Leipzig, 1890), and (3) H. Feige's *Die Geschichte des Mär 'Abhdîšō' und seines Jüngers Mär Qardagh, herausgegeben und übersetzt* (Kiel, 1890).

Pp. 535-48. F. Hommel reviews Paul de Lagarde's *Übersicht über die im Aramäischen, Arabischen und Hebräischen übliche Bildung der Nomina* (aus dem 35. Bande der Abh. der Kgl. Gesellsch. der Wiss. zu Göttingen), Göttingen, 1889. In almost all cases H. sides with Lagarde against the statements of J. Barth in his *Nominalbildung in den Semitischen Sprachen*, Vols. I and II. According to Barth 'die Grundlagen des Lagardeschen Buches (sind) unhaltbar.' Hommel maintains that Lagarde has proved his points, and believes that 'die Grundlagen des Barth'schen Werkes unhaltbar sind'; that the work itself contains, however, a great amount of valuable material. Hommel adds to Lagarde's proofs a few more from the Assyro-Babylonian language. See also E. Nestle in *Lit. Centr. Blatt*, 1890, col. 1099. On pp. 679-700 Barth has (1) an answer to Hommel's review; (2) believes that the question whether the verb is older than the noun or vice-versa, or whether both are equally old, must as yet remain an open question; (3) answers some objections raised by

Philippi in the latter's review of Barth's 'Nominalbildung' (Vol. I) in *Zeitschr. für Völkerpsychologie und Sprache*, 1890, p. 349 ff.

Pp. 563-649. Paul Horn prints the Persian text of the memoirs of the Shāh Tahmāsp I of Persia (c. 1563 A. D.), based on four MSS. One of these is at Teheran, and a copy was sent to him by Dr. Frank, the dragoman of the German embassy at Teheran. A German translation by P. Horn will shortly be published in Strassburg (Karl J. Trübner).

Pp. 650-78. The same writer describes Sassanian gems and coins, belonging to the British Museum (with three plates).

M. J. Goeje recommends E. Nöldeke and A. Müller's *Delectus veterum carminum arabicorum* (Berlin, 1890) to all students of the Semitic languages.—Nöldeke reviews C. Schiaparelli's *l'Arte poetica di Abū'l-'Abbās 'Aḥmad b. Yahyā Ta'lab*, and Ed. Mahler praises J. Epping's '*Astronomisches aus Babylon*' (Freiburg, 1889).

W. MUSS-ARNOLT.

REVUE DE PHILOGIE. Vol. X.

No. 1.

1. Pp. 1-11. Biography of Léon Renier, by Émile Chatelain. Renier was born at Charleville (Ardennes) in 1809, and died at Paris in 1885. Having completed his studies at the College of Reims, he was compelled by the vicissitudes of 1830 to suspend the further prosecution of his specialty, mathematics; and, as it seems, he was employed as foreman in a printing establishment, where he acquired experience that proved useful to him in his subsequent career as an epigraphist. In 1832 he was principal of the College of Nesle, and in 1838 he went to Paris and did editorial work for the *Journal général de l'Instruction publique*, aided in editing the *Dictionnaire encyclopédique de la France*, and worked on the *Biographie portative universelle*. In 1845 he founded the *Revue de Philologie* (first series), which was suspended after two years (and revived in 1877). Employment on the *Encyclopédie moderne* placed him henceforth beyond the reach of want. In 1847 he was given a modest position in the *Bibliothèque de l'Université* by Philippe Le Bas, and rose gradually until, on the death of Le Bas in 1860, he succeeded him as *conservateur administrateur*. Though he published a few translations and other unimportant works on Greek authors, he devoted his labors chiefly to epigraphy. The biography gives a concise account of his various missions; and his numerous important works and almost countless articles in periodicals. He discovered and published more inscriptions than any other man that has ever lived. A chair of Epigraphy was created for him in the College of France in 1861. When, in 1868, the *École des Hautes-Études* was founded by Duruy, Renier succeeded in having historical and philological science introduced and placed on an equal footing with physics and chemistry. For an account of other important acts, and for a portrayal of his peculiarly candid character, and the consequent opposition he met, and for a list of his works, the reader is referred to the original article.

2. P. 11. Meusel had shown (*Jahrb. für Phil.* CXXXI, 1884, p. 402 ff.) that in the classic period Roman writers usually employed *ab* before those

initial consonants of nouns which are preceded by *ab* in compd. verbs, and *a* before those preceded by *a*: as *abluo*, *averto*, hence *ab loco*, *a viro*. Max Bonnet points out that this distinction had fallen into total neglect by the sixth century, to judge from Gregory of Tours, who never uses *ab* before a consonant (nor *abs* at all). He wrote *ab stirpe*, *ab scolis*, *ab spiritu*; but these words in his day really began with prosthetic *i* or *e*, which remains in French.

3. Pp. 12-16. Interesting discussion, partly critical, of the Prologues of the Heauton Timorumenos, the Hecyra, and the Phormio, by Louis Havet.

4. Pp. 17-37. Notes on Athenian Heortology, by Albert Martin. In this article is elaborately discussed the series of festivals that began on the 6th and ended on the 9th of Pyanopsion, that is, the *Κυβερνήσια* on the 6th, the *Πυανόψια*, *Ὅσχοφόρια*, and *Ἐπιτάφια* on the 7th, and the *Θησεΐα* on the 8th and 9th.

5. Pp. 38-46. Paul Tannery directs attention to the fact that while the Greek geometers in designating points and lines marked by letters in a diagram always said *τὸ Α* and *ἡ ΒΓ*, Aristotle used the older method, and said *τὸ ἐφ' αὐτῷ Α*, *ἡ ἐφ' ἡ ΒΓ*. He proposes by means of this test to detect interpolations, and applies it to Meteorol. IV 5, where Aristotle demonstrates his proposition that the arc of the rainbow never exceeds a semicircle.

6. Pp. 46-48. Critical discussion of Italicus, Ilias 621-627, by Louis Havet.

7. Pp. 49-69. A. M. Desrousseaux, on behalf of the Conférence de philologie grecque (École des Hautes-Études), presents emendations of forty-five passages of Herodotos.

8. Pp. 70-82. Aemilius Baehrens emends thirty-seven passages in Cic. Brutus and thirty-eight in Cic. Orator; also Gellius I 7. 3.

9. Pp. 83-101. Émile Chatelain gives an account of the previous publications of the fragments of Aemilius Asper's commentary on Vergil, and publishes a new decipherment of them from the palimpsest of Corbie, now No. 12161 of the National Library of Paris, which contains the grammatical observations of Asper under the text of St. Jerome. In this article the text of Asper is printed in small capitals, letter for letter, and again underneath in ordinary form with the quotations from Vergil printed in full.

10. Pp. 102-112. Book Notices. (1). Notice of Iwan Müller's Handbuch der klassischen Alterthumswissenschaft, with review, chiefly very favorable, of Vol. II, by O. R. (2). Notice of Schliemann's Ilios, by W. (3). A rather unfavorable notice (by L. D.) of Benicken's Studien und Forschungen auf dem Gebiete der homerischen Gedichte, a work which devotes 1734 pages to one book (XII) of Homer's Iliad. "On peut croire M. B. sur parole: son livre résume tout ce qui a été dit sur la question homérique en général, et sur le chant 12 de l'Iliade en particulier . . . Tel qu'il est, cependant, il pourra rendre de grands services aux travailleurs, en leur tenant lieu de toute une bibliothèque homérique." (4). Favorable mention (by C. E. R.) of Kiessling and Prou's Dionysii Halicarnassensis Romanarum antiquitatum quae supersunt. Graece et Latine. (Didot.) (5). Favorable notice (by H. L.) of Uhlig's

Dionysii Thracis ars grammatica. (6). Favorable notice and *précis* of Weber's *Entwicklungsgeschichte der Absichtssätze*, Part II (by O. R.). (7). Brief notice of Grundmann's *Quid in elocutione Arriani Herodoto debeatur* (by O. R.). (8). Brief notice of Flach's *Chronicon Parium*; (9) of the Appendices and Register of Willem's *Le Sénat de la république romaine*; (10) of Dahl's *Zur handschriftenkunde und kritik des ciceronischen Cato maior*, and Vassis' *Codicis Ciceroniani bibliothecae Laurentianae ab Hieronymo Lagomarsinio n. 32 designati in primo de oratore libro nova collatio*.

No. 2.

1. Pp. 113-131. *De novis Sallustii Historiarum fragmentis*, by Dr. Edm. Hauler. A description of Cod. Aurelianensis 169(M), and the text of some fragments of Sallust discovered by Hauler under the text of Jerome's commentary on Isaiah. There seems to be some other text under that of Sallust. The author published a more detailed account in the *Studia Vindobonensia*, 1886, Vol. II.

2. Pp. 132-142. On the diver Scyllias of Scione, by Am. Hauvette. The author discusses especially the accounts in Hdt. VIII 8 and Paus. X 19. 1, and concludes that Scyllias existed only in a legendary tradition the origin of which we find in Hdt.

3. Pp. 142-144. H. Weil emends some passages in the letters of the Emperor Julian, published in 16th vol. of the *Hellenic Syllogos* of Constantinople in 1885.

No. 3.

1. Pp. 145-148. Pierre de Nolhac gives an interesting history of the MS of Festus made by Angelo Poliziano in 1485, and found by Nolhac. It is Vaticanus 3368.

2. P. 148. Notes on Luc. Dial. XVII 2, p. 407, and XXX 2, p. 451, by A. M. D.

4. Pp. 149-154. Remarks on various authors, by A. M. Desrousseaux. I. Emendation of a dozen passages in the correspondence of Fronto.

5. Pp. 154 f. F. P. Nash (Geneva, N. Y.) identifies the Sostratus of Juv. X 178 with the S. mentioned in Plut. *περὶ ποταμῶν* II 1.

5. P. 156. L. Havet discusses Cic. Orat. 16, 37, 144.

6. Pp. 157-160. L. Quicherat's (posthumous) discussion of Catull. 61. 206, where he reads "*ille pulveris eruti*."

7. Pp. 161-187. An elaborate discussion of the Latin imperative in *-to*, by O. Riemann. All the examples that occur in Plautus, Terence, Cicero's Letters, and Cicero's Orations, are collected and classified; and, until an exhaustive collection from all authors shall be made, the following partly provisory conclusions are drawn:

1. The imperative in *-to* is very common in Plautus, less common in Cicero's Letters and Orations.

2. The imperative forms in *-tor* are *archaic* (Plautus, Terence) and *poetical* (Vergil); no example occurs in Letters and Orations of Cicero, nor has the author seen any example in any of Cicero's works (except in citations of laws).

3. The use of imperatives in *-to* in prohibitions (after *ne, neve*, etc.) is very rare except in laws, treaties, etc.

4. In the 3d person *-to* is rare even in positive commands, except in laws, etc.

5. In all the works examined *-to* in the great majority of cases is employed when an act is not to be performed at once; but in Plautus is found a considerable number of exceptions, in Terence the exceptions are fewer, in Cicero they are rare.

6. Except in laws, etc., the use of the imperative in *-to* is not obligatory. When two imperatives relate to two successive actions, though *-to* is often used of the second, the ordinary imperative is probably more common; but when the time of an imperative is marked by a subordinate clause relating to the future, the form in *-to* is almost obligatory.

7. It is doubtful whether the use of the imperative as a *concession* (Kühner II, p. 152) was distinguished by the form from the other uses.

The article closes with a discussion of Cicero's remark on the imperative *conservanto* (Balb. 16, 35 f.).

8. Pp. 188 f. Louis Havet (1) points out errors in Deiter's collation of MS B of Cicero (*De Nat. Deor.*); (2) emends a frag. of Ennius (ap. Prisc. 10, 26); (3) discusses abbreviations following the name of the corrector of the MS of Fronto; (4) reads *exuvīs* for *exuviis* in Plaut. *Most.* 4, 1, 26, and a frag. of Naevius (32 Ribbeck).

9. Pp. 190-192. Book Notices. E. C. notices favorably the following works: (1) *Varronis de latina lingua libri*, ed. by Spengel; (2) *Gellii Noctes Atticae*, ed. by Hertz; (3) *Syntaxe de la langue latine*, by Antoine; (4) *De affirmandi particulis Latinis* (I. *Profecto* = 'probably,' 'no doubt,' except in archaic), by Steinitz; (5) *Études critique sur Properce*, by Plessis; (6) *François Guyet*, by Uri; (7) *Die Handschriften der herzoglichen Bibliothek zu Wolfenbüttel*, by O. von Heinemann; (8) *Notice sur des manuscrits du fonds Libri conservés à la Laurentienne*, by Delisle; and (9) L. D. reviews *Poètes et mélodes: Étude sur les origines du rythme tonique dans l'hymnographie de l'Église grecque*, by Bouvy. The first part of the work is confused and unreadable, but the bulk of it is very useful.

No. 4.

In this number is merely completed the *Revue des Revues*, which was begun in a preceding number.

Vol. XI.

No. 1.

1. Pp. 1-4. The post-Homeric Cyclics, by H. Weil. Chiefly a discussion of the *Μικρὰ Ἰλιάς* and its relations to the *Ἰλίου Πέρος*.

2. Pp. 5-9. Remarks on the Greek Epics, by H. Weil. Discussion of a few passages in Apollonios, *Μικρὰ Ἰλιάς*, Choirilos of Samos, and Hom. *Od.* (XI 489).

3. P. 10. H. Weil (1) proposes *ἡμέλησας* for *ἡθέλησας* in Eur. *Alc.* 644; (2) suppresses id. 668 and reads *κείνου δ' ἐγὼ* in 667.

4. Pp. 11-14. A. Cartault fixes with great probability the exact date of the composition of Silius Italicus' *Punica*. It covered the period from 88 (or very little before) to 101. Hence it was probably Sil. Ital. that imitated Statius (in his *Thebais*, composed 80-92), not *vice versa*.

5. Pp. 14-16. A. Cartault proposes *et alia poemata* or *poematia* for *epigrammata* or *et epigrammata* (MSS *et appamata*, *et ippamata*) in the enumeration of Lucan's work by Vacca at the end of his *Life of Lucan*. The author enumerates the works of Lucan, showing that all mentioned up to this point were poetical.

6. Pp. 17-24. Pheres, Admetus, and Herakles in the *Alcestis*, by Ch. Cucuel. The object of this article is to show that there is no comic element in the *Alcestis*, and to justify the scene at the burial and that at the table.

7. Pp. 25-32. Paul Girard rejects Cobet's explanation of Dem. de Cor. 169, and discusses very satisfactorily the whole question of barricading streets in Athens to force the people into, or keep them out of, the places of assembly, etc. In this case they were to be kept from collecting in the market-place on ordinary business, so as to secure a full attendance of the assembly to be held in the Pnyx. He reads *καὶ τὰ γέρε' ἀνεπετάννυσαν* (for MS *ἐνετίμπρασαν*, Cobet *περιπετάννυσαν*), and refers to the Schol. on Ar. *Acharn.* 21 f.

8. P. 32. L. Havet proposes *fausto . . . nupta* for *facto . . . rapta* in Propert. IV 11. 66.

9. Pp. 33-41. Paul Tannery discusses two abbreviations used in the Scholia on Aristarchos of Samos, and incidentally discusses a few passages.

10. Pp. 42-44. Sp. Vassis corrects the statement in O. Riemann's *Latin Syntax* that in indirect discourse *scripturum esse* can represent the direct *scribere* (unreal apodosis). In Caes. B. G. V 29. 1 f., he reads "*venturos* (sc. *fuisse*); *sese non*," etc. He cites fifteen examples from Cicero and a few from other authors to show that *fuisse* (not *esse*) was used.

11. Pp. 45 f. Ch. Comte shows that Commodian I 28 is a *double* acrostich, the initial letters giving *iusti resurgunt*, and the final *avari cremantur*, except that the present text gives *avars*: hence, for *lucraris* he proposes *lucrasti*—an unusual act. form.

12. Pp. 47-48. L. Havet (1) reads *nulla mala re os expolito muliebri* in Ter. *Heaut.* 289; (2) shows that *ipsus est* belongs to Antipho in Ter. *Phor.* 215 f.; (3) mentions a metrical ground for considering the *Adelphoe* as the second play chronologically.

13. Pp. 49-61. Remarks on Various Authors, by A. M. Desrousseaux. II. Critical discussion of twenty passages of Lucian and eight of Herodotos.

14. Pp. 61 f. Émile Thomas discusses Tac. *Dial. de Or.* 5.

15. Pp. 62-64. L. Havet (1) rejects Verg. *Aen.* VI 439 and the last two words of the preceding verse, which was originally defective until some one filled it up from Georg. IV 479; (2) corrects Servius ad *Aen.* VI init.; (3) reads *quai* as two shorts in a few passages of Plautus.

16. Pp. 65-68. G. Bernardakis critically discusses a few passages of Plutarch.

17. Pp. 69-74. E. Audouin shows that *ab* was used with the agent after *-ndus* when the meaning was that something was proper to be done, and the dat. when one was under an obligation to do something. He applies his principle to the thirty-three examples furnished by Cicero.

18. P. 74. L. Havet emends Ennius ap. Macro. VI 2. 25.

19. Pp. 75-77. L. Havet shows that in the case of names of *ports* prepositions were employed to denote the *where, whence* and *whither* relations, and discusses some special cases.

20. Pp. 78-79. A. Jacob: note on the signature to Par. Graec. 290.

21. P. 79. S. Reinach proposes *mox* for *non* in Lucan. Phars. VIII 146.

22. P. 80. L. Duvau: critical notes on Nonius, p. 145, 148, p. 480, 2088, and mention of MS in Brussels containing on its parchment covers some fragments of Servius' commentary on Verg. Aen. II.

23. Pp. 81-88. A new document relating to the *codex Remensis* of Phaedrus, by É. Chatelain. The codex of Reims was destroyed by fire in 1774. Collations that had been made are more or less inaccurate, and some of them are lost. Chatelain has found, in an ed. of Phaedrus in the library of the University of France, a few leaves on which Denys Roche, of Reims, answered questions asked by Vavas seur, of Paris, as to readings of the now lost codex. Chatelain publishes the correspondence including the answers.

24. P. 89. The MSS of Montpellier, by Max Bonnet. III. Quintilian.

25. Pp. 90-96. Book Notices. (1). Müller's Handbuch der klass. Alterthumswissenschaft, Vol. I, noticed, for the most part very favorably, by O. R. (2). Peajon's Xen. Memorabilia, Book I, unfavorably mentioned by A. J. (3). Roersch and Thomas, Éléments de grammaire grecque, highly commended by A. J. (4). Wilhelm Heraeus, Quaestiones criticae et palaeographicae de vetustissimis codicibus Livianis, very favorably noticed by O. R. (5). Krebs, Antibarbarus der lateinischen Sprache, 6th ed., by J. H. Schmalz, Vol. I, highly praised by O. R. Many important facts are stated in articles in which no one would think of looking for them; hence the reviewer urges the author to add an index of expressions cited out of their alphabetical order. (6). É. Chatelain, Paléographie des classiques latins, instalments 3-5. A list of the facsimiles is given without comment.

No. 2.

1. Pp. 97-118. Unpublished scholia of Petrarch on Homer, by Pierre de Nolhac. History and classification. These remarks of Petrarch on Homer, of course, shed light only on Petrarch.

2. P. 118. Darest emends Panegyrici Veteres (Teubner), p. 129, l. 17 ff. For *poenarum . . . desinit esse barbaria* read *Pictorum . . . desiit esse Batavia*.

3. Pp. 119-122. Critical remarks on "The Supremacy of Reason" (IV Maccabees), by Henri Bois.

4. Pp. 123 f. Julien Havet quotes from a letter of Gunzon (about A. D. 960) a passage which he shows to have been a pair of hexameters (not prose closing with a hexameter, as Thurot thought). This passage is quoted by Gunzon as a "proverb of Aristotle." Havet infers that the *Παροιμίαι* of Aristotle existed in a Latin metrical translation. The couplet as emended is:

Limax in concha sibi cornupeta esse videtur,
Seque putat cursu timidis contendere damis.

5. Pp. 125-128. Book Notices. (1). Leo Sternbach, *Meletemata graeca*, noticed, in the main favorably, by A. M. D. (2). Hartman, *Analecta Xenophontea*, pronounced by A. M. D. "a remarkable contribution to the history, interpretation, and criticism of the text of Xenophon." (3). Omont, *Facsimilés de manuscrits grecs des XVe et XVIe siècles*. General statement of contents, by E. C. (4). Ch. Cucuel, *Essai sur la langue et le style de l'orateur Antiphon*, noticed by O. R. An excellent work, but restricted too closely to a statement of facts without comparison with other authors or common usage.

No. 3.

1. Pp. 129-141. Fr. Blass, in a letter to Henri Weil, maintains that the first oration of Dem. against Aristogeiton is genuine, but that it was not intended as an oration to be delivered, but was written as an exercise, and never reduced to a final form.

2. Pp. 142-153. Several passages of the *Aulularia* critically discussed by L. Havet.

3. Pp. 153-160. Book Notices. (1). Müller's *Handbuch*, etc., Vol. IV, Part 1. Table of contents, with high commendation, by O. R. (2). Schoell and Studemund, *Anecdota varia graeca et latina*, Vol. I. List of contents, with commendation, by A. J. (3). *Classical Review*. A description, with favorable criticism. (4). Keller, *Thiere des classischen Alterthums*, etc., described by L. D. (5). Müllenhoff, *Deutsche Alterthumskunde*, commended by H. Gaidox. (6). A. Reisch, *De musicis Graecorum certaminibus capita quattuor*. A Vienna doctor-dissertation (1885) very highly commended by A. K. (7). Simon, *Xenophon-Studien*, commended by O. R., who mentions other works of the sort, and sums up the conclusions of Simon. The object of the work is to determine the different periods of composition by means of the style, peculiar expressions, etc. (8). Holden, *Plutarch's Life of Sulla*; tolerably favorable mention by A. J. (9). Van Leeuwen and Mendes da Costa, *Homeric Grammar*, revised and translated into French by Keelhoff, highly commended by O. R. The work has an appendix containing II. I and Od. I restored to their true form according to the authors' views. (10). Tycho Mommsen, *Beiträge zu der Lehre von den griechischen Präpositionen*, erstes Heft (1886), noticed, of course very favorably, by O. R. This work is the first of a series comprising the author's well-known Programmes.

No. 4.

This number merely completes the *Revue des Revues*, begun in the previous number.

M. W. HUMPHREYS.

HERMES, 1889.

III.

H. Dessau. *Die Scriptores Historiae Augustae*. There are elements, e. g. in the writings of Trebellius Pollio, which are incongruous, passages which commend the very adversaries of the monarch to whom the book is dedicated. Other difficulties are enumerated and emphasized in the discussion of the Life of Aurelianus by Flavius Vopiscus, undertaken at the request of the praefectus urbis, Tiberianus (303-4 A. D.). Chapter 44, Dessau urges, could not have been written in 305 or 306, an encomium of Constantius which at that time could not but offend the Caesar Severus who governed Italy. The reference to Diocletian, too (c. 43), presents difficulties. In a further section Dessau treats of falsifications and inventions, matter designed chiefly to fill space, composed with incredible assurance, e. g. a judgment of Marcus Aurelius (d. 180) about the reign of Pertinax (193 A. D.), and similar anachronisms. A young son of the Emperor Maximinus is called *imperator*, names and persons were sometimes invented. It is stated that the Emperor Maximinus was of Gotho-Alanic descent; such a fiction may have originated about 380 or 390 A. D.

The *Vita Severi* copies freely from Aurelius Victor, the *Vita Marci* from Eutropius. On the whole, then, weighty indicia point towards the latter part of the fourth century, while the attempt was made to present the vitae as composed in the earlier part of the century. The motive probably was the desire to add to the prestige of these writings by creating the appearance of greater antiquity (p. 375), and to make the books more salable. This date would easily explain the incongruities noted above. In the six authors there is a suspicious uniformity, e. g. in their mode of sketching personal characteristics; a similar uniformity is notable in their mode of making reference to authorities (p. 382). Another common trait is the quotation of Greek verses in Latin version, playing on the names of emperors, and the like. Granted that these writers lacked literary individuality, how are we to explain their common use of some extraordinary phrases, e. g. *in litteras mittere* (= *scribere*), *rei publicae necessarius*, *conflictu habito*? Dessau's inference is that we are confronted with biographies which are indeed the work of one and the same author.

Th. Mommsen. The Oldest MS of Jerome's Chronology. This MS, now in the Bodleian Library, was, according to E. Maunde Thompson, written in the sixth century, and affords important evidence in the province of Latin orthography, being free, on the whole, from the faults of medieval copyist spelling. The MS is superior to the MSS collated by Schoene. Some interpolations seem to have been made very soon after publication.

E. Bethe. Untersuchungen zu Diodors Inselbuch. What Diodorus in his story of primeval Crete quotes from the Theogony of Epimenides is a stupid forgery, or rather is derived from a stupid forgery, although there existed at one time a genuine theogony of that sage. The further description by Diodorus of Cretan antiquity and its heroic age is compared by Bethe with Strabo's quotation from Apollodorus of Athens (commentary on the *νέων κατάλογος*).

Similar tracing of material is attempted in connection with Diodorus' treatment of Samothrace, the Troad, Rhodes, Naxos, etc., suggesting derivation from Apollodorus.

A. Nauck. *Analecta Critica*, on passages from Homer, Aeschylus, Sophocles, Euripides, Theocritus, Callimachus, Oppian, in the tragedy *Χριστὸς πάσχω* (ed. Brambs, 1885), Lysias, Diodorus, Plutarch, Diogenes Laertius, Athenaeus, Choricus of Gaza, letters of Crates, Diogenes, Synesius, Eustathius on the *Odyssey*, p. 1669, 49. Of Latin writers, Ovid and Horace figure in these notes.

IV.

W. Schulz (*Ad Scholia Iuvenalia adnotationes criticae*) presents some of his observations on these scholia, having in the past had the material of Jahn at his disposal. In this article S. calls attention to older and later hands of scholiasts explaining the same *lemma*. A new edition by Beer of Vienna is expected.

O. Kern (*Zu den Orphischen Hymnen*) warns against the tendency to derive too much in the hymns from the Orphic Theogony. The reminiscences of the Theogony are crowded together in some few hymns, and the material suitable for a corpus of Orphic literature is growing from day to day, e. g. by means of papyri dealing with mantic matters and the like.

E. Maas (*Zur Hekabe des Euripides*) opposes Rassow's theory (*Hermes*, 1887, 514-534) of a recasting of the play. Rassow had exaggerated apparent incongruities¹ in the exposition of the action. The paper of Maas is an instructive piece of evidence illustrating anew the ever necessary *vāpē* καὶ μέμνασ' ἀπιστεῖν, particularly when the propounder of new theories operates with subjective premises which culminate in negation of tradition.

E. Mass. *Alexandrinische Fragmente*. The story of Philemon and Baucis (in Ovid) in its details is borrowed or copied from the Molorchus of Callimachus. Molorchus was a man who entertained Hercules when the latter was on his way to do battle with the Nemean lion (Callim. *Airia*). This trait is imitated also by Nonnus 17, 41 sqq. Further on Maas quotes minor *motifs* found in Nonnus, as well as in Tibullus and in Catullus, the original being some Alexandrian poem unknown to us.

M. Willmann. *Sextius Niger*. Pliny the Elder and Dioscorides *περὶ ὕλης ἱατρικῆς* (*materia medica*) employed a common source, being very nearly contemporaries of each other. This common authority probably was Sextius Niger *περὶ ὕλης*, whose time was about 10-40 A. D. The fact that Dioscorides carps so much in his references to Sextius is actually a proof of his borrowing, and his ostentatious display of other authorities does not disguise the fact that the vain creature Dioscorides found these in Sextius himself. A discussion of authorities used by Niger follows. The paper is really of more importance for the history of medicine than for that of literature.

H. Matzat. *Der Römische Kalender von 190-168 B. C.*

¹ On this subject cf. Goethe's remarks on incongruities in Shakespeare's *Macbeth*, Eckermann, April 18, 1827.—E. G. S.

I. W. Kubitschek. *Die Holzpreise des Diocletianischen Maximaltarifs.* In the time of Diocletian consumers began to suffer severely from combinations of merchants or trusts, and the emperor and his colleagues in 301 issued an edict fixing certain maxima of price (cf. the National Convention in Robespierre's time), without taking into consideration different economic conditions prevailing in the various provinces. Kubitschek explains the details of measurement preserved in epigraphic copies at Mylasa and Stratonicea in Caria.

E. Schweder. *Über eine Weltkarte des achten Jahrhunderts.* The Spanish monk Beatus (second half of eighth century A. D.) wrote a commentary on the Apocalypse, to which commentary he appended a chart of the world. Of this chart there are extant three copies: one at Turin, of the twelfth century; one in the British Museum (MSS No. 11695); the best being that in the Bibliothèque Nationale at Paris, of the eleventh century. The statements of Orosius seem to have been especially worked up. There are striking points of contact with the *Tabula Peutingeriana* and with the itinerary chart used by the cosmographer of Ravenna.

H. van Herwerden. *Aristophanea* (critical notes). The distinguished compatriot of Cobet manifests in every line a very high degree of familiarity with the critical history of the text. It is impossible and not at all essential in this place to estimate the degree of plausibility or convincing force in the various conjectures from Acharnians to Plutus, but exegesis will certainly be greatly advanced, and teachers reading Aristophanes will be glad to turn to the paper. Many real difficulties are emphasized.

U. Köhler. *Über Boeotische Inschriften aus der Thebanischen Zeit.* K. first discusses C. I. G. 1565 and Collitz-Meister No. 720, both being decrees in which *προξενία* was awarded; in the former, to a Carthaginian, Nobas; the name in the second is destroyed; otherwise the phraseology is substantially uniform. Köhler rejects the supposition that No. 1 referred to the reign of Perseus, 174 B. C., because two of the Boeotarchs mentioned are also named in Plutarch Pelop. 35. The historical inference of K. is noteworthy (p. 640): "The demos appointing the *proxeni* of the Boeotians is, of course, not the popular assembly of the Thebans, but the assembly (held in Thebes) of the united Boeotians."

E. G. SIHLER.

ENGLISCHE STUDIEN. Herausgegeben von Dr. EUGEN KÖLBING, Heilbronn. XII Band, 1889.

I.—Gothelf Willenberg. *The Sources of Osbern Bokenham's Legends.* Willenberg's results may be summed up as follows: Bokenham's poems are mere paraphrases of Latin originals. The original is usually a form of the Golden Legend, not always identical, however, with the version printed by Graesse in his edition. From the Golden Legend are taken the stories of Saints Elizabeth, Agatha, Cæcilia, Lucia, and Catherine, and that of the Eleven Thousand Virgins. From the Golden Legend and the Latin Life of St. Agnes, the story of this saint. From the Golden Legend and the New Testament, that of Magdalen. From the Golden Legend and two Latin sources, unknown, but similar

to two that are known, that of St. Margaret. From a Latin original not very different from one printed by Surius, *De Probatis Sanctorum Historiis*, Oct. 20, that of St. Faith. From a legend probably compiled from the Gospel and the History of the Birth of Mary, that of St. Anna. From unknown originals, those of Saints Dorothea and Christina.

M. Krummacher, *Language and Style in Carlyle's Frederick II.* The third instalment of this valuable study, treating of stylistic peculiarities, with copious citations.

J. F. Jameson, *Historical Writing in the United States, 1783-1861.* This is a lecture delivered at Johns Hopkins University in the early part of 1887. Two or three quotations will serve to illustrate the merits of this essay. On George Bancroft, the historian: ". . . The author's faults—his strident and uncritical Americanism, his rhetorical bias, his lack of objectivity in such studies, the superficiality of his insight into national psychology, his failure to perceive its complexities, his tendency to conventionalize, to compose his populations of highly virtuous Noah's-ark men. The excurses (*sic*) in which he attempts this are among the least happy and adequate portions of his work. Excursiveness not always well proportioned, is a frequent fault in it. Let us add that he is often not quite fair to the Tories and the British; and then let us confess that a work upon which a man of great talent, with unrivaled opportunities, has spent fifty years of faithful labor, could not fail to be a great book."

Speaking of Prescott: "The unity of design and beauty of detail, the romantic charm and picturesqueness, which the author sought, he certainly obtained. Scarcely less praise must be given to the conscientiousness of his research, though it may be doubted whether his critical insight was of the most penetrating sort. Nor was he a profoundly philosophical historian, distinguished for searching analysis. In one of his early private memoranda, he confesses that he hates 'hunting up latent, barren antiquities,' and though he later to some extent conquered this repugnance, the studies which make the analytical and sociological historian were never thoroughly congenial to him. It is mainly the concrete aspects of life that engage his interest, and as a historical painter of these he was, in the period of the publication of his works, the years from 1837 to 1858, without a rival save Macaulay and Michelet."

The Book Notices contain, among others, reviews of Sweet's *Second Anglo-Saxon Reader* (why *will* Sweet, who so long ago told us that 'Old English' was the proper term, continue to use 'Anglo-Saxon'?), Dowden's *Life of Shelley*, and Vietor's *Introduction to the Study of English Philology*.

The department of Miscellanea has a good note on Exodus 35:1b-35:3a, by M. Konrath, and an interesting biographical notice of Dr. Ingleby, by Karl Lentzner.

II.—A. Brandl, *Some Historical Allusions in the Chaucerian Poems.* "The Squeres Tale" is the first to be considered. No one has yet discovered a historical basis for this fragment, the nearest approach to it being the identification of certain names and descriptions with corresponding portions of Maundeville and Marco Polo. After explaining and rejecting an earlier

hypothesis of his own, Brandl finally identifies Cambyuskan with Edward III, Algarsyf with the Black Prince, Camballo with John of Gaunt, then the eldest surviving son of Edward III, Canace with the latter's second wife, the Spanish princess Constance de Padilla, the falcon (always the symbol of a member of a royal family) with Elizabeth, a daughter of John of Gaunt by his first wife, and the tercelet with John of Pembroke, the husband of Elizabeth, who had just deserted her and was about to marry Philippa de March, who is accordingly the kite. Canace is therefore not the daughter of Edward III, strictly speaking, but his daughter-in-law.

When Chaucer says, near the close of the Second Part,

And after wol I speke of Cambalo
That faught in lystes with the bretheren two
For Canacee, er that he myghte hire wyne,

he is referring to John of Gaunt's service with Pedro the Cruel, whose daughter Constance was, against Pedro's bastard brother, Enrique de Trastamara. The courtesy attributed to the tercelet by Chaucer appears in Thomas of Walsingham's characterization of John of Pembroke as "*liberalis, affabilis cunctis, humilis et benignus*." Brandl's means of identification is a passage from Knighton, quoted from Twysden, *X Scriptores*, s. 2677. The passage runs: "*Habuit autem idem pius dux in comitatu suo uxorem suam Constanciam, filiam regis Petri Hispaniarum, et Katerinam, filiam ejus, quam genuerat de eadem Constantia; duas etiam alias filias, quas genuerat de domina Blanchia, priore uxore sua, filia et haerede Henrici ducis Lancastriae, scilicet dominam Philippam non conjugatam et dominam Elizabet, Comitissam de Penbrok, dimisso viro suo juvene in Anglia. Qui comes post recessum uxoris suae fecit divorcium et desponsavit sororem comitis de Marchia. Dominus vero Johannes de Holande primo dictam Elizabet desponsavit sibi in uxorem.*"

According to Brandl, the dates would require us to assign the Squire's Tale to the early part of the year 1390. Within this year Pembroke had fallen in a tournament, and—Elizabeth had married again. This would account for the poem's remaining uncompleted.

Brandl's own summing up is here given in translation: "Chaucer composed the Squyeres Tale early in 1390 in honor of the Lancaster family, then newly returned from Spain, as a mark of his gratitude, and as a means of creating popular sentiment in their favor and of recommending himself anew to their graces. At the outset he alluded to Lancaster's popular father, Edward III, and to the grounds of the English expeditions to Spain (Part I). He next depicted the grief which had come upon Elizabeth, Lancaster's daughter, immediately after their return, on account of the unfaithfulness of her husband, John of Pembroke, together with the kindness of her stepmother, Duchess Constance (Part II). Then were to follow the account of the warlike deeds performed by Lancaster and his famous brother the Black Prince, besides something further concerning their father Edward III, who had favored these adventures. Instead, however, of treating his material with homely straightforwardness, Chaucer followed the current fashion in disguising it as fable. The necessary machinery he borrowed partly from Tartary, the most distant kingdom then known, using for this purpose the available portions of Marco

Polo's Travels; but in part he adopted the bird-masques of the English court poets who dealt with historical materials. The outcome of the whole was to have been a reconciliation, but this was rendered impossible by the marriage of the disloyal Pembroke with another lady in that very year (1390). Accordingly the poem remained a fragment. It was incorporated into the *Canterbury Tales* without change, as it would appear, and, with a delicate allusion to the poet himself, put into the mouth of the Squyere. The poem furnishes another proof of the realistic character of Chaucer's poetry, in the sense of its being a reflex of real occurrences, and an indication of his unswerving attachment to the House of Lancaster, an attachment which was again revealed by his speedy recognition of Henry IV, the usurping Lancastrian king, on his accession in 1399."

In the second place, Brandl considers the so-called "Chaucer's Dream." According to his interpretation, the elderly lady introduced early in the poem would be Margaret, Duchess of Clarence, the sister-in-law of Henry V; the "queen," Princess Katharine of France, whom Henry V married; and the knight, Henry himself. The earlier dream is referred to the year 1419, the second to the following year. Duchess Margaret is the same whose effigy, side by side with that of her two husbands, of whom the Earl of Somerset was the first, lies in the Warriors' Chapel of Canterbury Cathedral, near that of Archbishop Langton, the champion of English liberty. The correspondences are worked out by Brandl with much skill and plausibility.

K. Elze, Notes on K. Richard II.

W. Franz, *Dialect in Charles Dickens*, is a classified collection of materials derived from Dickens' novels for the illustration of dialectical peculiarities. The student of archaic forms or of contemporary manners will find much that is instructive in this paper, no less than he who devotes himself to modern English dialects as his peculiar province.

Karl Breul, *The Scientific Study of Modern Languages at Cambridge*. A useful article, showing how much remains to be done for modern language study at Cambridge, but written with moderation and apparent fairness.

Wilhelm Heymann, *The Definite Article in English*. The article takes the form of a criticism of G. Wendt's program on the subject, published at Hamburg in 1887.

The most valuable of the Book Notices are those on Morsbach's *Origin of the Modern English Literary Language*, and Einkenel's *Rambles through Middle English Syntax*. Both are highly praised, as they deserve.

III.—J. Caro, *Minor Publications from the Auchinleck MS*. Part X is an edition of *Horn Childe and Maiden Rimnild*, preceded by a discussion of the origin of the story of Horn and the mutual relations of the various versions, and by an investigation into the dialect, metre, and style of the poem edited. There are two opposite views concerning the poems of Horn, represented by Wissmann on the one side, and by Stimming, Zupitza, and Child on the other. According to Wissmann, King Horn is the oldest form of the legend, and from it came the French romance; the English romance sprang either from the

French or from an independent modification of King Horn. The Scottish ballads on the same theme follow the outlines of Horn Childe. According to the other view, King Horn, Horn Childe, and the ballads, derive equally and immediately from a legend current among the people, the French romance coming from an English source traceable to the same ultimate origin as King Horn, but independent of the latter. Caro's conclusions are: King Horn is the oldest of the three versions, but not necessarily the ultimate literary form. The French romance is derived from one or more English versions parallel with the existent King Horn. Horn Childe cannot possibly go back to King Horn on the one hand, nor direct to the popular legend on the other; probably the author had several manuscripts before him. Caro then represents the hypothetical relations by a diagram or family tree.

W. Sattler, *Zur Englischen Grammatik*, VII (continued). Sattler's collection of examples is noteworthy. Thus in the discussion of the plurals of names of fish, he cites 206 quotations of 109 different sorts of fish. From this we gain the information that *whitebait*, for example, is never used in the plural as a collective, nor *smelts* in the singular for the same purpose, but that *herring*, *carp*, *haddock*, and several others are used in both singular and plural in the collective sense. In so thorough a fashion does the author go about all his researches under this head.

W. Swoboda, Acquisition of a 'Vocabulary' in a Foreign Language, and Especially in English.

The Book Notices have a review of Part II, First Half, of Schipper's English Prosody, and of Ward's edition of Marlowe's *Faustus* and Greene's *Friar Bacon and Friar Bungay*.

In the Miscellanea, Max Kaluza adds to the discovered sources of the *Cursor Mundi* three additional ones; M. Konrath shows that the Kentish version of Sawles Warde is independent of the other Middle English form, though derived from the same Latin original; and H. Schuchardt, under the title Contributions to the Knowledge of Creole English, quotes a number of letters by *Indian* boys and girls, as written from their training-schools at Carlisle.

(In the Report on Vol. XI of *Englische Studien*—A. J. P. XI 380—in St. Godric's second poem, *at* should be *pat*).

ALBERT S. COOK.

BRIEF MENTION.

If Professor Robinson Ellis, who has taken under his special patronage the Minor Latin Poets, had not induced his friend, Mr. E. J. L. SCOTT, to undertake a translation of *Calpurnius* into English verse (London, George Bell & Sons, 1890), that little-read bucolic poet would doubtless have waited many generations for an interpreter, and we should have lost a series of English poems, which by deftness of rhyme and vividness of expression show that the translator could have done even better things on his own account than he has done for Calpurnius. Mr. Scott's translation of the Eclogues of Vergil in a similar style had a certain quaint fascination, to which attention was called at the time (A. J. P. V 544). His rendering of Calpurnius, if not so close, leaves us better satisfied, for he has burnished Calpurnius until the shade of the very moderate poet might well wonder at the new foliage and the alien fruit. To be sure, the pastoral simplicity of Calpurnius suffers somewhat, but one does not care for the pastoral simplicity of the man who composed the adulatory Fourth Eclogue—which is too much even for those whom Vergil and Horace have taught a certain indulgence toward court-poetry. The Latin text is not very carefully printed, and it is surprising that Professor Ellis should have allowed so many old-fashioned spellings to stand. Nor does the translation always accord with the text. In III 95 we find

● Vel propius latitans vicina saepe sub horti
translated Or 'neath this neighboring altar lie,
 As oft in its vicinity,

and as *saepe* is spelt elsewhere *sepe* (V 95), we are in a daze until we look up the variant reading

Vel propius latitans vicina saepe sub ara.

There are other slips, but not of sufficient magnitude to mar pleasure or to rouse mirth.

Mr. SHUCKBURGH brings the equipment of a classical scholar to bear on his edition of *Sidney's Apologie for Poetrie* (New York, Macmillan & Co.), which follows in the main the text of the edition of 1595. The notes are ample for the illustration of the text, and a full index enhances the value of the notes. The excellent work of Professor Cook, noticed in a recent number of the *Journal* (XI 389), is not superseded by that of his English rival, and those of us who are accustomed to deal with tenth transmissions of stock observations will be pleased to see how the American editor and the English complement each other. Detailed criticism would be out of place here. It may be observed, however, that the story of the Sophister (58, 16), 'that with too much

subtlety, would prove two eggs three,' is to be found in Sir Thomas More, and that Mr. Shuckburgh ought not to have been satisfied with a mere parallel; and it is possible that he has dismissed *Herculea proles* (62, 28) too lightly. Why should Sidney have fallen into Latin here, if he meant nothing more than 'royal, as were the royal families of Sparta'? We want a contrast to *libertino patre natus*, and that contrast is furnished by the *Herculea gens* of the Fabii—that ancient Roman family, commemorated in a passage, that Sidney must have read, Ovid, *Fasti* II 235 foll.:

Una dies Fabios ad bellum miserat omnes;
ad bellum missos perdidit una dies.
Ut tamen *Herculeae* superessent semina *gentis*,
credibile est ipsos consuluisse deos.

In the paragraph of his grammar (§511 Anm.) in which Aken comments on the rarity of the opt. after *ἕως*, he cites only aorists. But the real trouble is to find present optatives, and while there is a well-known instance in Thuc. 3, 102, cited in A. J. P. IV 418 (see Goodwin, M. and T., rev. ed. §614), that is an 'until' *ἕως*. A 'while,' 'so long as' *ἕως* with the pres. opt. after an histor. tense has not turned up, so far as I know. Perhaps the bare announcement will bring out a number of these skulkers, but in the article cited (1883) I could only say, 'pres. opt. as required by general rules of dependence; so after inf. and *ἄν* (= opt. and *ἄν*), Plat. Theaet. 155 A': μηδέποτε μηδὲν ἄν μείζον μηδὲ ἐλαττον γενέσθαι μήτε ὄγκῳ μήτε ἀριθμῷ ἕως ἴσον εἴη αὐτὸ ἐαυτῷ. The language of Aristotle lies outside my range of special investigation, but I am interested to find in the newly-discovered 'Αθηναίων πολιτεία one example of the missing construction that goes back to the fourth century (p. 80, 8): δοκεῖ (Θηραμένης) πάσας (sc. τὰς πολιτείας) προάγειν (= προῆγεν) ἕως μηδὲν παρανομοῖεν.

Revisions that do not revise are too common to astonish even the revisers, and hence my merriment was not much stirred by the Homeric laughter with which some of my friends have greeted the reappearance of Kühner's classical lapse which turned 'Bekker's Homerische Blätter' into 'Bekker's Fliegende Blätter.' See Blass's *Kühner* (1890), I 1, p. 98. But that is after all a mere lapse, and pages of the Journal might be taken up with a record of the perpetuation of grave blunders. So in Gustav Meyer's *Gr. Gr.*, first ed. (1880), p. 110, we read 'Aristophanes Wolken 870, wo sich Sokrates über die Aussprache des *κρέμασσι* beim alten *Pheidippides* lustig macht,' and the same blunder reappears in the ed. of 1886, p. 125. To be sure, Gustav Meyer is quoting from Curtius, *Stud.* I 2, 275, and it is easy to see how in his eagerness to make a point Curtius turned the facts round; but the error was pointed out at the time of the first ed., and some of the hundreds of Meyer's readers ought to have secured the correction before the second appeared.

In the closing words of Mr. HEWLETT's valuable paper *On the Articular Infinitive in Polybius* (A. J. P. XI 470), the writer denies the existence of *παρά* = *διά* with the articular inf. in Demosthenes. The passage which I cite in the

foot-note (21, 96), if written out would have contradicted the text: *παρὰ τὴν πενίαν καὶ ἐρημίαν καὶ τὸ πολλῶν εἰς εἶναι*, but it is one thing to use an articular inf. at the end of a group of substantives (see A. J. P. IV 241), another to use it independently. An independent use is cited by Lutz, *Praepositionen bei den Attischen Rednern*, p. 153, from 19, 42: *παρὰ τὸ προαισθέσθαι κεκώλυται*, and this should have been adduced. See also Rehdantz-Blass, *Index II*, s. v. *para*.

À propos of my little note in the last number of the Journal (XI 483-487) on the Articular Proper Noun in Greek, I would call attention to the beginning of a useful series in *Philologus* XLIX 3, by KALLENBERG, *Der Artikel bei Namen von Ländern, Städten, u. s. w.*, in which he expresses his 'conviction of the inadequateness of our knowledge as to the most ordinary phenomena of Greek.' The same conviction has haunted me for many years, and may serve to explain, if explanation be needful, the persistency with which I have urged the importance of accurate attainments in a language, which is more raved about than possessed.

ERRATA.

A recent medical writer maintains that there is no absolute immunity from seasickness, and so no amount of typographical experience will insure an editor against nausea at errors of the press. The unwelcome queasiness will return when least expected. My boyhood's friend Pyrgopolinices shakes his empty head at me from A. J. P. XI 372 (l. 19 from bottom) and asks what has become of the *g* so necessary to his martial register; and the comparatively venial fault of an imbricated 'vaüt' in Mr. Ashburnham's review of Ellis's *Avianus* (IX 362, l. 13) has haunted me so for two years that I have given up entirely that seemingly inevitable quotation, 'La saulce vaut mieux que le poisson,' and have gone back from Scaliger to Scaliger's original,

ὀβολοῦ τάριχος, δὲ ὀβολῶν τάρτρυμα.

And now *à propos* of Ellis's *Avianus*, it appears that in the last number (XI 522, l. 24) we must read 'Ellis is too much inclined to assume that the prosody of *Avianus* was the prosody of the classical period' instead of 'the prosody of *Avianus* was prosody.' In my judgment the mistake is not much to be deplored. Unfortunately all mistakes are not so venial, and Jean Paul's humorous boast remains a *pium desiderium*, 'In jeden Druckfehler soll sich Verstand verstecken und in die Errata Wahrheiten.'

RECENT PUBLICATIONS.

Thanks are due to Messrs. B. Westermann & Co., New York, for material furnished.

AMERICAN.

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Brinton (Daniel G.) *The American Race.* New York, *N. D. C. Hodges*, 1891. 6 + 392 pp. 12mo, cl., \$2.

Flügel (Felix). *A Universal English-German and German-English Dictionary.* Fourth rev. ed. In 12 pts. Pts. 2, 3, 4. New York, *B. Westermann & Co.*, 1891. 9 + 224, 193-416, 417-640 pp. 4to, pap., \$1.

Livius (T.) Books XXI and XXII; ed. on the basis of Wölfflin's ed., with introd. by J. K. Lord. Boston and New York, *Leach, Shewell & Sanborn*, 1891. 26 + 388 pp. Maps. 16mo, cl., \$1.20.

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Plato. *Talks with Athenian Youths*; tr. from the *Charmides*, *Lysis*, *Laches*, *Euthydemus*, and *Theaetetus*. New York, *C. Scribner's Sons*, 1891. 20 + 178 pp. 16mo, cl., \$1.

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